Hallway Age Holiday ings



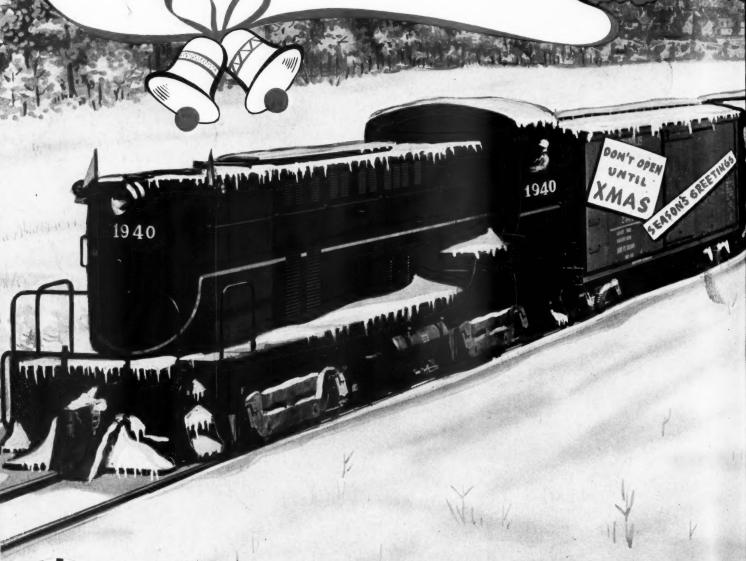
DIESEL POWER

Ring out the Old Bring in the New

ELECTRO-MOTIVE CORPORATION

UBSIDIARY OF GENERAL MOTORS LA GRANGE ILLINOIS U.S.

Best Wishes
OF THE SEASON TO
OUR MANY FRIENDS



HILL

HE BALDWIN

THE BALDWIN LOCOMOTIVE WORKS

hiladelphia

RAILWAY AGE

St. Lawrence Project Should Be Submitted to Transport Board

Whatever may be their disagreement upon detailed issues, there is one general observation upon which substantially all persons who know anything about transportation are in complete unison. That is that the country has a much larger transportation plant than it needs; hence that transportation is absorbing a larger share of the wealth and income of society than there is any necessity for it to absorb; and that rivalry among the various agencies for a traffic volume insufficient to keep all of them busy has produced a condition of chaos and bitterness which, in the public interest, ought to be resolved.

Excessive Plant, the Source of Transport's Troubles

When it comes, however, to prescribing the actual steps that need to be taken to mitigate uneconomic rivalry in transportation, and to bring order out of the existing chaos, the transportation "doctors" disagree among themselves-largely because most of them have some specific interest to advance, to which they are more devoted than they are to the larger national interest in securing dependable transportation for the entire country at the lowest possible over-all cost. To be sure, some halting steps in the direction of bringing order into the transportation situation have been taken by the provision for more-or-less uniform regulation of rates and practices of a major portion of the nation's transportation enterprises-but with important exceptions, notably those of private carriage by highway and by water and of for-hire bulk carriers by water. Yet, as all informed persons recognize, regulation alone does not get at the heart of the problem of excessive rivalry in transportation; nor does it check the continued expansion of transport plant beyond the reasonable needs

The central, and thus far entirely unsolved, problem of the transportation industry (and of the nation in its dealing with the transportation industry), is two-fold: (1) How shall traffic be divided among the various rival agencies so that

each task may fall to the agency which can perform it most economically; and (2) how can the provision of new transportation facilities be controlled, so that only those facilities will be built for which a genuine public need exists?

As far as public policy toward transportation goes, the above paragraph is a substantially complete statement of the problem. All other more specific questions of policy are subsidiary, rather than in addition, to the central problem of dividing the traffic in the national interest (rather than in the selfish interest of the agencies themselves), and of discouraging the further expansion of transportation plant, except as is required in the public interest. Congress, in enacting last summer the Transportation Act of 1940, did not attempt to provide an immediate solution for this central problem of transportation policy; but it did recognize its existence, and it provided machinery by which a solution might be, at least in part, eventually attained. This provision occurs in the Transportation Act of 1940, in the sections of that act calling for the appointment of a Transportation Board to investigate and report upon

"the relative economy and fitness of carriers by railroad, motor carriers, and water carriers for transportation service, or any particular classes or descriptions thereof, with the view of determining the service for which each type of carrier is especially fitted or unfitted; the methods by which each type can and should be developed. . . ."

What the Transport Board Needs for Success

Here at last, after twenty years of unprecedented growth in transportation plant and in equally unprecedented waste and unprecedented bitterness, Congress provided a concrete means by which this costly chaos might be brought to an end. There is no guarantee, of course, that the machinery provided by Congress will be successful in its great task. It cannot succeed unless the men named to the Board are of sufficient intelligence to comprehend the problem which faces them, and of sufficient character to reach their con-

clusions with loyalty to national, rather than particularistic, interests. It cannot succeed, moreover, unless all the conflicting special interests can be induced to bow to the larger national interest which it is the duty of this Board to uphold. Least of all can the Board make a success of its great task, unless Congress and the President, who have created it, will respect the integrity of their own creation—and refrain from sabotaging its work.

Such sabotage, whether conscious or not, is the inevitable result of the President's announced intention to proceed forthwith, if he can, with the construction of the St. Lawrence Seaway. Here is a gigantic transportation facility, of the economic justification for which there is, to use mild language, profound disagreement on the part of disinterested authorities. If it is constructed, the new facility will inevitably come into competition with existing facilities—primarily the Trunk Line railroads and the New York State Barge Canal. That President Roosevelt minimizes the seriousness of this competition does not alter the fact that, after all, persons who are more expert in transportation and no less disinterested than he is, are sincerely of quite a different opinion.

The existing chaos and waste in transportation have arisen entirely from the selfish behavior of the private interests in and around the transportation industryinterests concerned with advancing their own fortunes and their narrow personal enthusiasms, without proper subordination to the welfare of the nation as a whole. None of the various segments of the transportation industry has been wholly free of the vice of particularism at the public expense-but no one of them has sinned in this direction more egregiously than the commercial groups desirous of advancing some local waterway at the expense of the general public. In every case these waterways have been advocated locally, either to give the community an advantage over its commercial rivals; or else to equalize and thus remove a similar advantage previously given to some rival community.

National Interest Should Be the First Consideration

Waste began in transportation the minute the federal government began to make grants of money for the construction of facilities whose uneconomic nature was demonstrated by the fact that private capital would not undertake them. Waste continued in transportation when the political authorities, having built transportation facilities which were without commercial justification in one locality, were forced to yield similar favors to every other locality. Waste can end in transportation only when such catering to selfish local interests ends; and when machinery is provided to control the expansion of transportation in subordination to the larger national interest.

By signing the Transportation Act of 1940, President Roosevelt gave recognition to the principle that the nation can no longer afford to have its transporta-

tion facilities controlled solely by a political scramble of the multitude of diverse and special interests. We have followed that procedure for twenty years with results whose unwisdom is clear to all. Instead, the President gave his approval to an Act of Congress which called for a competent and impartial appraisal of all agencies of transportation "with the view of determining the service for which each type of carrier is fitted or unfitted." But it was three months ago that President Roosevelt gave his approval to that Act of Congress and at the present writing he had still not named the Board for which that Act provided. Instead, he is insisting that the St. Lawrence Waterway be hurried to completion—in violation of the spirit if not the letter of the Transportation Act; because, if there is any phase of the transportation situation which is controversial and which, as a consequence, deserves impartial consideration from the standpoint of the interest of the nation as a whole, it is this project.

President Should Set Example of Self-Restraint

Is the President of the United States, then, alone of all Americans, to sit in judgment of his own cause? Must all other aspects of the transportation situation be impartially analyzed and decided in the public interestexcept this one venture, which is the biggest one of all? But, if an exception to the general rule of impartial weighing in the public interest is to be made in favor of this particular project which the President has espoused, can he expect other persons and other interests in the country to vouchsafe a self-restraint in subordination to the national welfare and national unity which he refused to show? After the President of the United States has so openly and lavishly satisfied his particular whims and interests with respect to the national transportation plant, what moral pressure will he be able to exert upon Congressmen and highway interests and railroads and organized labor and local business men to induce them to accept sacrifices in the national interest in sound transportation, which the Transportation Board may call upon them to make when it has determined "the service for which each type of carrier is especially fitted or unfitted?"

This paper is sincerely opposed to the St. Lawrence Seaway, not only because we believe it will injure the railroads and their employees, but because we are also convinced that it will mulct the taxpayers far beyond any benefits they can hope to receive from the venture. We do not, however, expect the people of the United States blindly to follow our opinion—even though we can claim some experience and some expertness in the study of transportation questions (certainly more of both than, with due respect, the President of the United States can claim). Instead, we are entirely willing to entrust the decision as to the wisdom or the unwisdom of this project to the Transportation Board, provided that the President names to this board men whose competence and disinterestedness is beyond any ques-

tion. We believe that most of the leaders of the railroad industry, despite the great interest which they have at stake, would also agree to abide in good faith by a decision reached by a competent and impartial Board.

Transport Needs a Respite from Wrangling

In the absence of a rule of law and with a lack of formal machinery to settle the great controversies in the field of transportation, interested parties have been compelled as a matter of self-protection to fight for their very lives. The result has been a loss to the public, not only in the piling up of uneconomic and excessive transportation facilities which somebody has had to pay for, but in the diversion of the talents of transportation men from constructive attention to their internal problems, and the dissipation of their energies in trying to hold their own with their rivals. If a rule of law and machinery for securing justice is preferable in the relations of individual men to each other-rather than each man securing what justice he can through his individual efforts at attack and defense—then such a rule of law and reason, with proper machinery therefor, should be equally effective in ending the unproductive warfare in transportation. We believe that the partisans in transportation can be brought to an agreement on this principle—but not if the President of the United States insists that his particular enthusiasms in transportation are to be beyond the rule of impartial adjudication which all others must accept.

The questionable propriety of the President's going forward with this St. Lawrence project, when machinery which the law calls upon him to set up can remove the proposal from the realm of controversy, is made evident by the following facts, the truth of which no one denies:

President Roosevelt himself, on November 26, announced that

appropriations for non-military public works would be severely reduced in the Budget to be submitted to Congress, to make way for bona fide national defense appropriations. of rigid economy, it was stated, would apply to non-essential works such as non-defense highways, rivers and harbors.

As to the need for the St. Lawrence development in order to provide electric power for national defense industries, John D. Battle, the responsible spokesman for the National Coal Association, has stated that, "Coal-burning electric generating plants can as a rule be built in less than half the time required to construct dams and reservoirs and install turbines for water power . . . and we have the word of the National Defense Commission that the time element is a prime consideration. . . As to cost, Mr. Battle stated that coal-burning power plants could be constructed at one-third the cost per kilowatt of capacity of the capital outlay necessary for hydro-electric plants.

The nation's outstanding disinterested authority on inland waterway transportation, Dr. Harold G. Moulton, has estimated that the waterway project would cost the general public in taxes far more than the saving in rates it would provide for its users. (The corollary follows that, if it can be shown that subsidizing shippers is desirable, other means less costly than

this project should be sought to that end.)

Mr. Roosevelt has asserted that the project will not harm the railroads and their employees. Presumably, though, the railroads and their employees have a knowledge of what will hurt and what will benefit them which is fully as competent as that of the President; and railroad opinion is unanimous in the belief that the project will injure the rail carriers more than it will benefit anybody else-that is, they believe that the net effect of the project on the national economy as a whole will be minus, rather than plus.

The President Ought to Abstain from Sitting in Judgment on His Own Case

The above facts, cited in opposition to the St. Lawrence project, are not given as unanswerable arguments why the nation should reject this proposal finally and definitely. They are set forth merely to indicate that there exists respectable opinion in opposition to this project which is just as much entitled to impartial consideration in the national interest as the personal and partisan view of the President of the United States. The President has no moral right to free his own preju-

Subterfuge and the St. Lawrence Project

On November 26 the President warned against enthusiasts who would try to put over unnecessary public-works projects on the ground that they were "for national defense." He said nothing at the time about enthusiasts who would use not merely the subterfuge of defense but would try to secure legislative approval of their projects by further subterfuges evading the clear constitutional re-

Within a few days the President was announcing that the St. Lawrence seaway and power project had suddenly become necessary for "the national defense." And though he insisted that he had always had the defense uses of this project in mind, the fact is he had not mentioned defense uses when in 1934 he asked the Senate to ratify the treaty with Canada under which the St. Lawrence project was to be set up.

Now the New York Times publishes a report that certain of the President's advisers, in order to get the St. Lawrence project through, are prepared to urge even an evasion of the procedural requirements which Mr. Roosevelt conceded in 1934-that the St. Lawrence project necessitates a special treaty between the Dominion and the United States, and that the treaty, of course, would be subject to the ratification of the Senate.

When the President asked the Senate to ratify the treaty proposed in 1934, the Senate refused to give him the twothirds majority necessary for a ratification vote. Now, it is reported, some of the President's advisers have wrenched out of a general United States-Dominion treaty of 1910 a passage which may possibly support the St. Lawrence project if simple majority votes in favor can be secured for it in the House and Senate.

Thus the President is already pressing for the St. Lawrence project on grounds he did not cite in 1934, and which in 1940 he has warned against if they are urged for the pet projects of others; and some of his advisers, by current reports, are urging him to use means which evade constitutional provisions conceded in 1934 by Mr. Roosevelt to Whatever the motives of some of his advisers, it is to be hoped and, indeed, expected that the President will not now seek to evade the same fair-and constitutional-test on the issue which he invited in 1934.

From an Editorial in the Baltimore Sun.

dices on such a vital question from the scrutiny of an impartial tribunal, to which, by his approval of the Transportation Act of 1940, he has implied that the decision of all such controversial questions in transportation should be left.

Vastly more important than the St. Lawrence issue itself is the question of the future of the transportation industry in this country—whether it is to be brought under the rule of law and of reason, administered by properly constituted authority; or whether the law of the jungle which has produced the present chaos shall continue its sway indefinitely. By his approval of the Transportation Act, the President declared himself in favor of the rule of reason. By his continued delay in appointing the Transport Board called for under that Act—and his effort in the meantime, to put over his controversial St. Lawrence project, without submitting it to the judgment of that Board, he has voted for the continuance of the law of the jungle.

All other transportation partisans are asked, in effect, to lay down their arms of selfish political combat—submitting to the adjudication of their conflicting opinions in the national interest. But the President, whether deliberately or not, has placed himself above the rule of reason. He has the political power, so why should he take the chance that even-handed justice and reason might decide the case against him? If all other partisans in the transportation picture follow the lead of the President of the United States, then chaos and waste in this industry is going to persist for a long, long time.

Spotting Charges—\$2.50 Gained, How Much Lost?

A disposition on the part of members of the staff of the Interstate Commerce Commission to favor the imposition of special car-spotting charges at large industrial plants, as expressed in Examiner Weaver's proposed report in the so-called Staley proceeding (I. & S. 4736), probably arises from a sincere desire to "conserve the revenues of the carriers." But like many acts of intended helpfulness by outside parties who do not have responsibility for the whole effect of their ideas, such concern for the railroads may prove to be a Judas' kiss. In all likelihood if the examiner's recommendations be given general application—and it is the opinion of many competent observers that acceptance of them by the Commission itself would create a basis for widespread application—the railroads would lose far more in revenue to their competitors than they could ever recoup in car-spotting charges.

Shippers are naturally alarmed at any disposition on the part of the I. C. C. to establish a precedent for making it necessary for the railroads to charge terminal handling fees in addition to line-haul rates, similar in substance to the British system of separating "conveyance charges" from team-or-side-track handling charges. The National Industrial Traffic League at its annual meeting in New York on November 13 and 14, heard a special report describing the situation as "dangerous" and declaring that, "There are abundant signs that within the next few months steps may be taken, if nothing is done to block them, which in their final result will amount to reinstatement of the very same proposition of car-spotting charges which met with universal opposition in 1915 and which the aroused membership of this organization, speaking for shippers generally, succeeded in then defeating."

If such possibilities cause alarm to shippers, they ought to be doubly alarming to the railroads. This imposition of car-spotting charges at the larger plants generally will burden shippers with extra transportation bills. But the diversion of traffic to trucks—which are not affected by spotting charges in any shape or form—will affect the revenues of the railroads to an even greater extent. The receipt of spotting fees of \$2.50 per car is no windfall if the traffic on which it is levied eventually leaves the rails permanently for the ubiquitous motor vehicle.

It is understood that most responsible railroad traffic men share the N. I. T. League's position in the matter and a number of traffic officers of a big Eastern road have privately expressed a desire to have Ex Parte 104-II re-opened as a whole. Although in conversation with shippers railroad representatives have by no means been unanimous in this view, it is contended by some shippers that the railroad men favoring the car-spotting charge principle are for the most part the legal-minded officers who usually "show zeal in situations involving the collection of money."

The best expression of the railroads' majority view are the brief and exception to Examiner Weaver's proposed report in the Staley case filed in behalf of the Illinois Central, Illinois Terminal and Baltimore & Ohio, of which the main exceptions are understood to derive from Elmer A. Smith, the I. C.'s distinguished commerce attorney. One of the principal contentions of the railroad respondents is that the mere size and traffic of the Staley plant are made controlling by the examiner; that the latter fails to recognize that the character of switching services in issue reflects the volume of traffic and nothing else. Says the brief: "What the Examiner here recommends to the Commission is that the Commission impose what seems to us to be a penalty on the Staley Company because it uses railroad service, and because it paid to the Decatur railroads over \$4,500,000 in freight charges."

The chief argument of the railroad's brief is that the Examiner's recommendations, designed, it is supposed, to conserve their revenues and reduce operating expenses, would, if carried out, have precisely the opposite effect. Summing up the matter in simple terms of dollars and cents, "It would not require a very large increase in truck traffic to and from the Staley plant to cause a loss in revenues to these respondent railroads that would substantially exceed these spotting charges on interstate shipments."

Railway Taxes Reach All-Time High

Railway taxes in 1940, it now appears, will reach their all-time high, with the tax bill of the Class I lines amounting to approximately 405 million dollars, and crossing the 400-million mark for the first time in the history of the railroad industry.

The previous peak level of railway taxation was reached in 1929, when the taxes of these same lines amounted to almost 397 million dollars. Some interesting comparisons are afforded between these two years.

Railway total revenues amounted to \$6,280,000,000 in 1929, and will be approximately \$4,275,000,000 in 1940. With a reduction of more than two billion dollars, or of 32 per cent, in gross revenues, rail taxes have set a new peak. The increase in the relative burden of taxation is shown by the fact that taxes consumed 6.3 cents out of each dollar of revenues in 1929, while the 1940 taxes are taking 9.5 cents out of each revenue dollar.

Similarly, railway net earnings, before the payment of fixed charges, amounted to \$1,252,000,000 in 1929, and will be approximately \$650,000,000 in 1940. With a decline of more than 600 million dollars, or of 48 per

cent, in net railway operating income, rail taxes have set a new peak. The increase here in the relative burden of taxation is shown by the fact that out of the total sum available for taxes and a return upon railroad investment, taxes took 24 per cent in 1929 and 38 per cent in 1940.

Similarly railway net earnings, after the payment of fixed charges, amounted to \$897,000,000 in 1929 and will be approximately \$155,000,000 in 1940. With a decline of more than 700 million dollars, or of 83 per cent, in net income, rail taxes have set a new peak. The increase here in the relative burden of taxation is shown by the fact that out of the total sum available for taxes and for the owners of the railways, taxes consumed 31 per cent in 1929 and 72 per cent in 1940.

The railroad tax bill for 1940 marks the fifth successive annual increase which the railroads have suffered. Since 1935 railroad taxes have risen by more than 70 per cent. With a reduction in 1940, as compared with 1929, of one-third in railway operating revenues, of almost one-half in net earnings before fixed charges, and a reduction of five-sixths in net income after fixed charges, the establishment of a new peak in taxation is a striking illustration of the burdens placed upon the railways.

Trucking - Sound or Inflated?

Your reporter had the privilege not long ago of discussing competitive conditions in the transportation industry with one of the prosperous pioneer truckers. He was asked what caused him to sell his long-haul operations. He answered, in substance:

"It required six times as much equipment to operate my 400-mile run as it did my 40-mile run. My 400-mile rate (based on railroad rates) was only double my 40-mile rate. The 400-mile line simply did not add up for me as a sound venture. Of course, I solicited only higher-rated, heavy-density, volume traffic on the long-haul run, and only enough in each terminal to give me capacity loadings in each direction—just as many of the boys are still doing. But I knew my railroad competitors would eventually get wise to what I was doing, so I let the operators, who couldn't see that far, have my long-haul business while they were still willing to pay me a good price for it."

On the heels of this, a friendly critic from the

On the heels of this, a friendly critic from the motor truck field, who is a specialist in rates, has questioned figures published in this space, particuarly those in the October 19 issue, showing cost of truck operation at 12 cents per mile for a 10-ton load. Your reporter does not claim to know all there is to know about trucking costs, but such information as he has, has been gleaned from intimate association with truck operations for over 20 years—stretched out all over the U. S. and covering intra-plant, logging, highway construction, intercity, and inter-plant shuttle operations.

This experience points to the conclusion that a sound bottom for a truck rate structure ought not

be lower than 12 cents per truck-mile as a minimum. No maximum has been suggested. If anybody has evidence that 12 cents is too high for a minimum figure, his grounds for such a conclusion will be gladly received.

The viewpoint set forth in this space is not one of unfriendliness to truck operation per se—far from it—but rather one of warning to those operations which are extended beyond the range of the truck's genuine economic superiority. Many if not most of the trucks in the long-haul field are operating in an inflated situation—not supported by sound economy. The danger in such an inflated situation is that the artificial conditions which sustain it can, and probably will, be removed. The operator whose limited radius gives him costs below those of railroad service is on safe ground. The pick-and-choose operator, working in the zone where railroad operating costs are lower than his, has builded his business upon sand.

Of course, truck operators in such situations do not like to be reminded of the underlying precariousness of their position. Neither did Florida land speculators back in the mid-Twenties like to be reminded that there was no substantial foundation under the sand-lots out in the sticks, for which they were paying prices which would have been high, even, for New York or Chicago property. Florida was sound—but not 1926 land prices. Trucking has a sound basis too, and the names to be looked for in the business ten years hence will be those who are now building on that sound basis, rather than on a purely arbitrary rate-structure, which is man-made and man-removable.

From



Fast schedule and luxury service are designed to compete for business moving in private automobiles

HREE luxury coach streamliners, the Dixie Flagler, the City of Miami, and the South Wind, were placed in operation between Chicago and Miami, Fla., on December 17, 18 and 19 respectively, by nine railroads comprising three Chicago-Florida routes to provide the "most sensational and the fastest daily service ever offered this territory." Superb comfort in which "you sleep soundly in soft individually adjustable seats; enjoy happy hours in the charming tavern-lounge-observation car; and delicious low-cost meals in the diner," is the keynote of these trains. Besides being outstanding luxury coach trains, their operation represents a unique plan of pooled service which affords a considerable saving in train miles and equipment.

These new trains and their superior service are a challenge to highway competition and are designed to attract business from private automobiles and busses. Their field is extensive for, based upon travel between Chicago and Florida last year, 73 per cent of the 1,500,000 visitors to Florida came in private automobiles and buses. While these trains are intended to capture Florida travel, their schedules include numerous intermediate stops so as not

to overlook local business.

The three routes over which these trains travel traverse different sections of the middle west and south, with the result that the new service blankets a large area without duplication. The Dixie Flagler, owned by the Florida East Coast, operates over the Chicago & Eastern Illinois, to Evansville, Ill., the Louisville & Nashville, to Nashville, Tenn., the Nashville, Chattanooga & St. Louis to Atlanta, Ga., the Atlanta, Birmingham & Coast to Waycross, Ga., the Atlantic Coast Line to Jacksonville, Fla., and the Florida East Coast to Miami. The City of Miami, owned by the Illinois Central, operates over the I. C. to Birmingham, Ala., the Central of Georgia to Albany, Ga., the Atlantic Coast Line to Jacksonville and the Florida East Coast to Miami.

The South Wind, owned by the Pennsylvania, operates over the Pennsylvania to Louisville, Ky., the Louisville & Nashville to Montgomery, Ala., the Atlantic Coast Line to Jacksonville and the Florida East Coast

Under the plan of pooled service that has been devel-

oped for these trains, a train leaves Chicago each day over one of the three routes, the Dixie Flagler departing from the Dearborn Street station on one day, the City of Miami from Central station on the next day and the South Wind from the Union Station on the third day. Although revenues are not pooled, tickets are interchangeable and passengers have complete freedom in the selection of routes, going and returning. With this arrangement, a passenger on his going trip does not have to secure a refund if after purchasing his ticket he changes his day of departure or decides to take another route. He also has a choice of routes returning. To make the service uniform, each train is similar in design and location of cars and all seats are reserved. Each train provides table d'hote as well as a la carte dining service at popular prices, a complete breakfast being served for 50 cents and luncheons and dinners for 60 cents.

These trains provide the fastest service ever offered between Chicago and Florida—29½ hr. Previously, the fastest time was the 31 hr., 40 min. schedule of the Dixieland of the C. & E. I. The trains depart from Chicago at 9:40 a. m. and arrive in Jacksonville at 9:30 a. m. the next morning and at Miami at 4:10 p. m. Returning, departure from Miami is 6:25 p. m. and from Jacksonville at 1:05 a. m., with arrival at Chicago at 10:55 p. m. Under this schedule these trains lay over only 2½ hr. at Miami and 10¾ hr. at Chicago, with the result that they are in revenue service 82 per cent of

the time.

This 29½ hr. schedule results in a high average speed and exacting operation, involving numerous station stops, the Dixie Flagler averaging 48.6 m. p. h. for its 1,434 miles, with 17 intermediate stops; the City of Miami averaging 50.6 m. p. h. for its 1,493 miles, with 25 intermediate stops; and the South Wind averaging 52.8 m. p. h. for its 1,559 miles, with 16 intermediate stops.

Special ceremonies to popularize the inauguration of the trains were arranged by the railroads and builders of the cars. These activities started on December 11 when representatives of the press departed from Chicago to meet the Dixie Flagler at Miami and, with business leaders from Florida and Georgia, ride it back to Chi-

Michigan Boulevard to Biscayne Bay in 29-½ Hours



cago. On December 13, other groups from Chicago traveled to Indianapolis, Ind., to meet the South Wind, while officers of the I. C. rode the City of Miami on a test run from Chicago to Champaign, Ill., and return. On its trip to Chicago, the Dixie Flagler was greeted

On its trip to Chicago, the Dixie Flagler was greeted by bands and members of the chamber of commerce at Evansville, Terre Haute and Danville, where beauty queens, chosen to participate in the christening ceremonies at Chicago, boarded the train and joined the "Sun Queens" from Miami and Atlanta.

Following the arrival of the train at Chicago, a series of events took place to celebrate the inauguration of the Dixie Flagler. On the morning of December 16, the Sun Queens participated in a style show and at noon Charles T. O'Neal, president of the C. & E. I., welcomed visitors at a luncheon at which the speakers included R. R. McCormick, editor and publisher of the Chicago Tribune, and Edward G. Budd, president of the Edward G. Budd Manufacturing Company. J. B. Ford, vice-president of the C. & E. I., acted as toastmaster. In the evening, delegations from the south, the "Sun Queens" and railway officers were guests at a dinner given by the Edward G. Budd Manufacturing Company. Speakers included General Chas. G. Dawes and Samuel O. Dunn, editor of the Railway Age and chairman of the board of the Simmons-Boardman Publishing Corporation.

The Dixie Flagler, after being exhibited at the Dearborn station on December 16, was christened on December 17 by the "Theme Girl of the Orange Bowl Festival,"

(Continued on page 940)

Champaign Louisville

Centralia Louisville

DEvansville

Uackson

Chattanooga

Albanya

ACL

Wayeross

Legend

City of Miami

South Wind

Dixie Flagler

Miami

Route of the Chicago-Florida Streamliners



The "Dixie Flagler" Assigned to Chicago-Miami Service

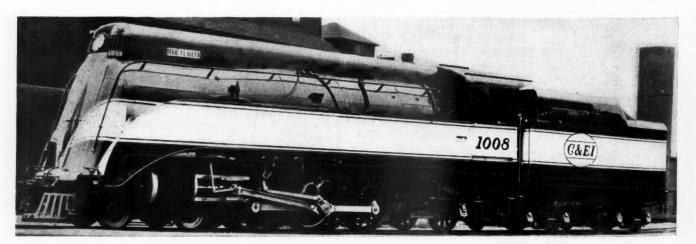
Stainless-steel coach train, built in 1939 for local service on the F. E. C., now operates over C. & E. I. route

HE "Dixie Flagler," departing from Chicago on its first trip to Miami, Fla., on December 17, inaugurated the de luxe coach service between Chicago and Miami on a 29½-hr. schedule, in which three trains of separate ownership on three routes are providing a daily service. This train, which operates to and from Chicago over the Chicago & Eastern Illinois, is owned by the Florida East Coast over which all of the trains in the new service operate between Jacksonville, Fla., and Miami.

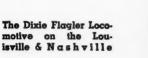
*For a description of this train (the Henry M. Flagler) see the Railway Age for December 23, 1939, page 962.

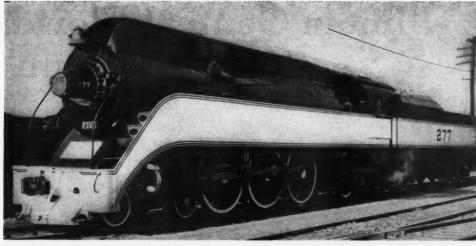
The Dixie Flagler* was built in the fall of 1939 by the Edward G. Budd Manufacturing Company, Philadelphia, Pa., for the Florida East Coast to operate in local service between Jacksonville and Miami. The train consists of seven cars. The first car is a combination mail-storage-dormitory-coach in which are bunk accommodations for a crew of 12, a steward's compartment, and rotating reclining seats for 22 passengers.

A 52-passenger chair car and three 60-passenger cars provide the remaining revenue seats, of which there are a total of 254. The seats in all these cars are of the rotating type with individually reclining backs. Each of these



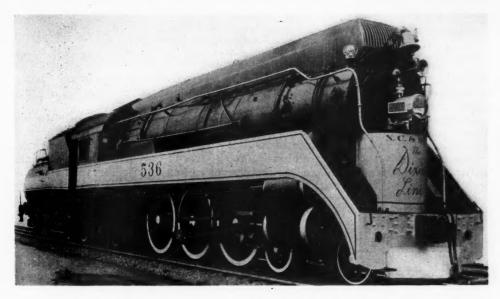
The Dixie Flagler Locomotive on the C. & E. I. Is Finished in Black with Silver Bands on the Sides





cars has spacious men's and women's lounges and in the 52-passenger car there is a compartment for a hostess. The diner has chairs for 48 and there are seats for 57 persons in the various compartments of the tavern-lounge-observation car.

the wall tones are in olive gray and the upholstery blue. In the 52-passenger car the wall tones are the same, but are associated with upholstery in warm tones of brown. In two of the 60-passenger cars the wall colors are slategray green. In one the upholstery is in a wine rose and

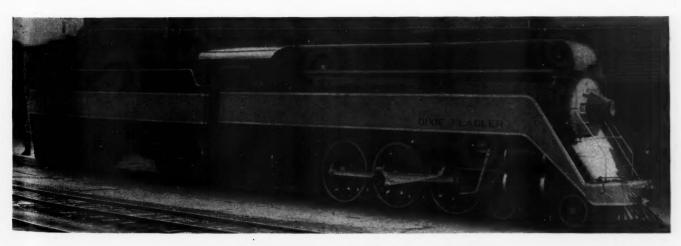


Another Streamline Steam Locomotive for the Dixie Flagler —A Nashville, Chattanooga & St. Louis Pacific Type

The unifying note in the decorations of all of the cars in this train is gray, various tones of which are used in combination with distinctive upholstery colors in each car. In the short passenger compartment in the first car

in the other, a rose tan. In the third of these coaches the walls are a deep gray with ceilings in light blue and upholstery in blue green.

(Continued on page 940)



The Atlanta, Birmingham & Coast Locomotive for the Dixie Flagler

Illinois Central Florida Train "City of Miami"



Seven-car train, embodying welded low-alloy, hightensile steel construction, is Diesel powered and has revenue seats for 254

HE Illinois Central Florida train "City of Miami" is notable for beauty of line and color, as well as for the provision of comfort and convenience features designed to appeal to the most exacting passenger requirements. The cars, designed and built by the Pullman-Standard Car Manufacturing Company, in collaboration with Illinois Central engineers, embody lowalloy, high-tensile-steel girder construction with a saving of practically one-third in weight, as compared with former conventional riveted carbon-steel cars of equivalent capacity. The seven new cars include one baggage-dormitory-coach, one women's coach with nurse's room, three coaches for men and women, one dining car and one lounge-bar-observation car, with a total of 254 revenue seats and 135 non-revenue seats.

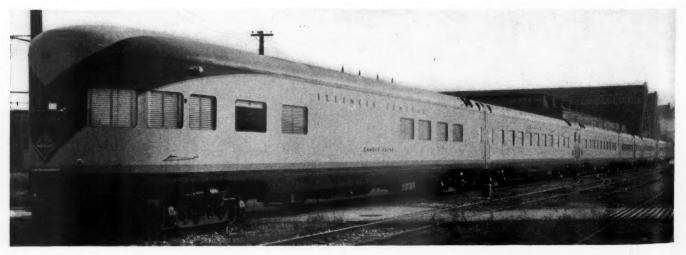
Motive power for this train is supplied by a 2,000-hp. Diesel-electric locomotive, recently purchased by the Illinois Central, from the Electro-Motive Corporation, subsidiary of General Motors, La Grange, Ill. This Illinois Central locomotive handles the train between Chicago and Jacksonville, Fla., where it is serviced in the Diesel-electric facilities at that point. Between Jacksonville and

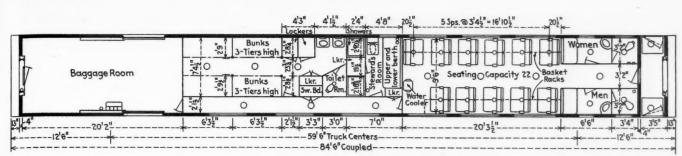
Miami, Fla., the train is moved each way, by the Henry Flagler, a Diesel-electric locomotive furnished by the Florida East Coast.

Each car of the "City of Miami" has a coupled length over the platforms of practically 84½ ft., truck center distance of 59½ ft., width over side sills of 10 ft. and height of rail to top of roof of 13½ ft. The car weights, as well as the seating capacities in the respective compartments, are indicated in one of the tables. The general arrangements of the car interiors are shown in the drawings.

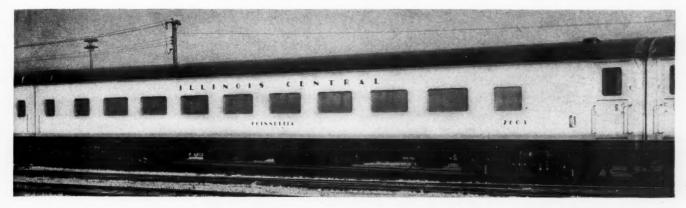
Distinctive Decorative Treatment

The distinctive styling for both the exterior and interior of the "City of Miami" has been developed by the Pullman-Standard Color and Design Department, to typify Florida's vibrant colors and tropical background. The exterior is done in orange, palm green and scarlet. The green is used for the roof and skirt coloring, separated from the orange of the car body by scarlet stripes placed at the eave and lower edge of the girder sheets.

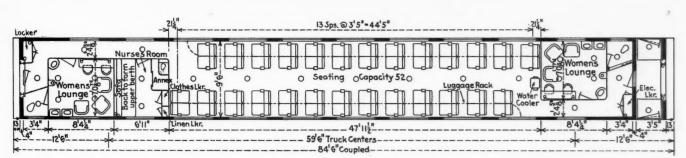




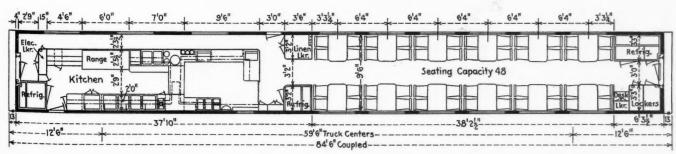
The Combination Baggage-Dormitory-Coach



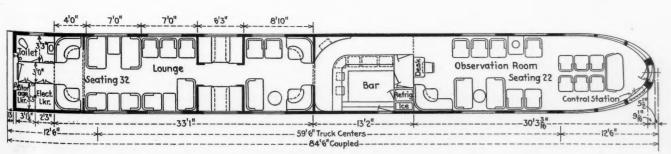
One of the Coaches Showing Straight Sides and Wide Windows



Women's Coach with Nurse's Room—The Three 60-Passenger Coaches with Men's and Women's Lounges Are Similar Except for the Absence of the Nurse's Room



The Dining Car



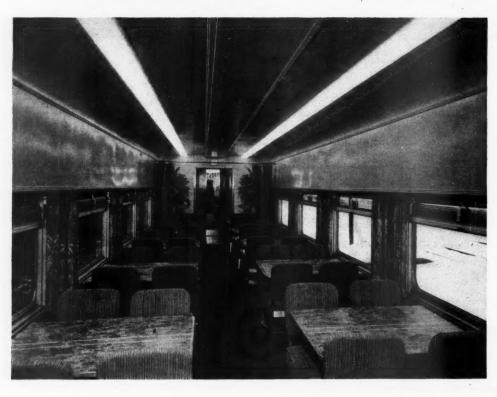
The Lounge-Bar-Observation Car



One of the City of Miami Coaches

ger is going or which he has just left. Comfortable reclining seats are installed and a new style of individually controlled glareless lighting assures further comfort. A twin-lens type of fixture is used on the basket rack, so arranged that one occupant can read or sleep independently of his fellow traveler. The center lighting is arranged to light only the aisle and is glareless to the passenger even when he is in a reclining position. Draperies at the windows are in a palm-leaf design. Four color schemes are used in making the coaches different. One scheme has yellow, blue, and coral for its predominant tones; another has green, copper and gold; still another has tan, blue and gold; and the last has blue, copper and tan.

The dining car has beige, green and rose as its color scheme and is featured by continuous strips of fluorescent ceiling lighting, photomurals, etched mirrors on pier panels, and a specially designed carpet in a bamboo pattern. Florida colors are again transposed into the greens and corals of the floor covering, the green and gold of the draperies, and the coral of the seat covering. The photomurals covering the entire bulkheads at either end of the dining room are done in the same warm sand tones as the ceiling and complement the color of the



The Attractive Dining Room Features Include Fluorescent Lights

The structure and styling of the power unit is emphasized by a streamline wave effect of green, giving an effect of speed and driving power, with the train name lettering in a graceful curve on either side of the streamline nose. The brilliant flash of the orange, green, and scarlet is carried throughout the train to the tail end of the observation car, where the roof color is carried in sweeping lines down to the tail sign.

The interior of the train has been worked out always with the thought of Florida in mind, native woods, such as bamboo and sheet cork being utilized in the decorative treatment. In the chair cars, large photomurals, done in a new color process to match the various colors of the interiors, decorate each bulkhead of the main coach compartment. The subject matter is carefully selected for its artistic merit and from a view of creating further interest in that part of the country to which the passen-

natural cork used as a covering on the wainscoting. The aluminum dining chairs are especially designed with vertical tufting on the back, adding to the seating comfort, and the linen is marked with the train name, worked out in colors complementary to the general color schemes.

The lounge-bar-observation car, because of its unique floor plan arrangement, lends itself to unusual decorative treatment. Semi-secluded cocktail sections are placed on either side of the entrance, upholstered in coral leather, with yellow piping, and with the curved wall background done in tropical zebra wood, and separated by natural bamboo grilles from the main lounge. The main lounge has frieze panels and wainscoting of sheet cork, pier panels of zebra wood, and furniture coverings of green, coral, and gold with a burgundy colored carpet in a bamboo pattern. The table tops are real wood (zebra wood) with a Formica coating, and have bamboo veneer

for pedestals. Continuous fluorescent lighting, in two strips on the ceiling, is so placed as to give maximum

light over the seats.

The bar section is the real decorative keynote of the train, with a natural bamboo bar and canopy against a photomural background, an artificial palm tree, fibre matting floor covering, and carved cocoanut masks. The walls opposite the bar are lined with flesh-toned mirrors and, by reflection, make this section seem many times larger than it actually is. The back bar has an indirectly lighted mirror on which is sand-blasted a tropical fish design in full color and is framed with scarlet and yellow leather matching the under part of the canopy. At the bar is a mural route map of the territory through which the train travels. It is so arranged that, by means of illumination, the progress of the train and the scheduled time of the next stop can be shown.

The observation room has frieze panels of faux-satine

The body center plates, of heat-treated cast steel, utilize wear plates between the body and the truck center plates and are equipped with Pullman locking-type center pins.

The side framing is of high-tensile alloy-steel welded girder construction, to meet the A. A. R. specifications for the construction of new passenger cars. Inward curving skirts, of .05-in. mild steel, are used at the sides below the side sills, with hinged doors giving access to underneath equipment. Sheathing plates are of alloy steel No. 14 gage, with corrugated stiffeners spot welded on the inner surfaces. Wide and dummy type vestibules are used as shown on the floor plans. The end of the observation car is rounded to give a streamline effect. The oval or turtle-back roof, continuous from end to end of the car without hoods, is secured to carlines and purlins of pressed alloy steel. A supporting framework is provided for headlining and air ducts. Roof sheets



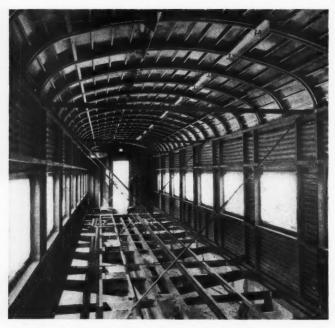
The Observation Room

flexwood, pier panels of sheet cork, and wainscoting of imitation leather. The seat coverings are in blue, coral, and gold, the draperies in blue, tan, and gold, and the bamboo pattern carpet combines all of these colorings, giving the foundation to the color effect. Fluorescent lighting is again used in this room, so arranged on the ceilings as to conform to the seating arrangement. The seating arrangement at the observation end provides a flexible group which allows bridge groups to be formed or gives passengers complete freedom in placing chairs to suit their individual comfort for reading or observing the scenery. The writing desk, magazine table, table lamps, and tables are all carefully worked out, and are done following the general treatment of the room with faux-satine, cork, and bamboo, recalling the materials used elsewhere in the train.

The cars are fabricated of low-alloy, high-tensile steel, welded construction being utilized for the most part with the exception of a limited number of places where rivets are required. The underframe, including the center sill, bolsters, crossbearers, end sills, platforms, etc., are of the built-up welded alloy-steel construction. Buffer beams and wings are designed to include anti-climb features as required by the A. A. R. specifications.



The Bar Section of the Lounge-Bar-Observation Car



The Underframe and Superstructure Are Made of Welded Low-Alloy High-Tensile Steel

are No. 18-gage alloy steel, reinforced with V-shaped stiffeners welded to the underside.

The false floor in each of these cars consists of .051in. aluminum alloy applied over the underframe members to which it is riveted. The flooring in the passenger compartments is Pullman arch-type, ½ in. deep, made of .051-in aluminum, laid crosswise of the car with Tuco lightweight floor composition applied 3% in. thick over the top of the corrugations. A sealing coat of special floor dressing is next applied, over which is placed linoleum or rubber. In the kitchen a layer of cork board sloping slightly to a gutter at the center line is applied over the composition flooring. This in turn is covered with Monel metal, made in one piece to form a pan and arranged to drain into the center gutter of the kitchen and thence to the track without dripping on the underneath equipment.

On top of the sub-floor sheets, one layer 1 in. thick, of Type-M Stonefelt is applied to the coaches and Fiberglas to the diner and lounge-observation car. The sides, ends and roof are insulated in the same manner. Fireproof muslin is used on both sides and the insulation is held in place with steel wires running longitudinally. Between the inside finish and the framing members, 1-lb. deadening felt is used to prevent metallic contact. All water piping, water tanks and steam pipes are cov-

ered with Wovenstone insulation.

A combined draft gear and buffer is installed at each end of all cars with four Waughmats in a single group. Tightlock A. A. R. couplers with integral yokes are installed at all car ends, including the observation end; the coupler shanks are cast integral with the draft-gear yokes. These drawbars are of the National type.

At vestibule side doors the steps are of the Pullman pivoted-type, operating in conjunction with trap doors and without the ice-breaking feature. The step treads are of Alumalon. Sill steps at the ends of the cars, including the observation end, meet the I. C. C. requirements and stirrup steel treads are applied at all baggage and loading side doors. Vestibule diaphragms have the Pullman suspension with outer diaphragms of stretch rubber in three sections, one for the roof and one for each side. The rubber is colored orange and green to match the exterior colors and lining. The center diaphragms are of folded-type canvas, impregnated with

fireproofing material.

In passenger-carrying cars, the wainscoting is 3/16-in. tempered Presdwood and the pier panels are of .050-in. aluminum, and frieze panels ,060-in. aluminum, including a portion of the basket rack. Partitions are ½-in. aluminum-covered plywood, except for the kitchen and pantry passageway where single thickness aluminum is used. Ceilings are .060-in. aluminum Window capping for the main coach compartments and passageways, toilets and lavatories is Caf-O-Lite in color to match. Moldings are steel snap-on type.

The kitchen and pantry have Monel-metal finish throughout. Suspended shelves are installed between the kitchen and pantry and there are disappearing doors for all kitchen and pantry cabinets below the upper lockers. The Stearnes coal-fired range, equipped with water back, water side and hot-water coil circuits, has forced draft, or a booster and forced exhaust from the back of the range top. The ventilation outlet and smoke jack are independent of each other. The steam table is of Monel metal and has a removable, although tightfitting, pan. Another important feature of this kitchen equipment is the garbage-disposal unit electrically op-

Individual Car Weights and Seating Capacities

	T 1 1	Seatin	g capacity
	Light car weight, lb.	Revenue	Non-revenue
Baggage-dormitory coach	, 105,100 , 106,600	22	
Main room		52	
Nurse's room			4
Women's lounges (two)			6
Coach, Plan 7440, 2 cars			
Main room		120	• •
Women's lounge			6
Men's lounge Coach, Plan 7440-A	105,600	* *	10
Main room		60	
Women's lounge			3
Men's lounge			4
Dining car Lounge-bar observation		• •	48
Lounge room			32
Observation room			22
		254	135
* Weight per car.			

erated and known as the Disposal, furnished by the General Electric Company.

Center air ducts for the delivery of conditioned air into the car are built into the decks, between the head lining and the roof, being made of .041-in. aluminum covered with a 1/2-in. asbestos paper over which Stonefelt Type-A insulation is applied.

Body end doors, baggage side doors, kitchen side doors, low-type bar loading door and vestibule side doors are made of black steel, the latter being of the two-part (Dutch) type. The side loading door into the kitchen is made in one piece with a drop sash. Side doors in the baggage compartment are of Pullman flush-type construction. The observation end door is curved to suit the installation of the end-tail car name sign. Interior doors are of \(\frac{1}{2} - \text{in} \), thick aluminum covered plywood.

Window sash throughout the train consists of fixed double-glazed dehydrated units in aluminum frames, set in the car frames and supplied by the Pittsburgh Plate Glass Company. Toilet room and pantry sash are glazed with an outer light of Pressed Prism glass and an inner light of 1/4-in. Safety Duplate laminated glass. All other units are glazed with an outer light of ¼-in. polished plate glass and an inner light of ¼-in. Safety Duplate laminated glass. Dehydrated sash is applied with suitable insulation against metal contacts.

An illuminated car numbering device is set in the pier panels of each coach immediately adjoining the vestibule, projecting from the side walls of the car slightly so that the illuminated numerals at the center are easily readable by a person on the platform.

Luggage racks in the coach compartments are of the Pullman continuous type, with individual light fixtures and a toggle switch for each, also a blue light built into

the center ceiling light fixtures.

The air-conditioning equipment on these cars consists primarily of a Waukesha Model-D ice engine, 7-ton, 64 volt d.c. refrigerating unit and Everdur sub-cooler used in connection with a Pullman Type-E overhead unit. Air is distributed in the cars through an overhead duct on the center line of the car. The steward's and nurse's room and the bar have Areo-Fuse type outlets. A grille in the bulkhead partition supplies air to the baggage compartment. Air filters for recirculated air are 16-in. by 2-in. by 20-in. Detroit throw-away type; fresh-air filters are Midwest type, 9-in. by 4-in. by 25-in. Air conditioning is supplied to all passenger compartments in the train, and to the dormitory section of the first car.

Drinking-water coolers in all coach compartments are of the electric-mechanical console type, connected to the

air-pressure water systm.

The heating system is the Vapor Zone-Control type with economy regulators, including copper unit fin-type radiation with manual control in the baggage compartment. Overhead heating is also available to operate in conjunction with the air-conditioning system. The water protection system utilizes a Vapor economy-type regulator. Vapor insulated flexible metallic conduits are utilized between cars.

Air brake equipment is of the New York schedule HSC type with electro-pneumatic features and an individual generator type speed governor control on each car. New York sanding arrangement, Schedule HS-678-E, is installed at the front wheels of the rear truck of each car except the lounge-observation car.

Electric power required for the operation of these cars is supplied from a generator and storage battery. The generator is the Safety 10-kw. body-hung type, having Spicer drive with automatic clutch. There is a safety arm underneath the Spicer drive. Safety generator regulators, reverse-current relays and 75-amp. lamp regulators set at 61 volts are installed. Batteries in the baggage-dormitory coach and two of the other coaches are of the Edison 50-cell G-11-H-type, rated at 311 amp. hr., for eight hours. The other two coaches have Exide EPTA-11, 32-cell batteries rated at 294 amp. hr. for eight hours and the diner and lounge-observation cars have Exide batteries of the same make, rated at 470 amp. hr. for eight hours.

Luminator lighting fixtures are used in general in dormitory and coach sections; Safety fluorescent lighting fixtures, in the diner and in the observation-lounge room, and Adams & Westlake fixtures, in general, in passageway ceilings, wash rooms, etc.

There are two 12-in. exhaust fans in the kitchen and one in the pantry. Back of the kitchen range is a 9-in. exhaust fan. A Sturtevant intake floor fan with a filter supplies clean fresh air to the forward part of the kitchen. There is also one 9-in. exhaust fan in the observation room.

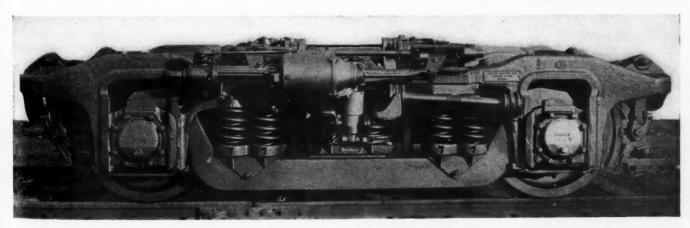
Radio equipment consists in the observation car of an R. C. A. chassis built into the most convenient location in the bar where it operates from the 110-volt train line. The train is wired for a public address system which permits announcements to be made throughout the train from two central points. On the radio panel is a switch which connects the output circuit of the radio to the microphone train line. This enables the output of the radio to be broadcast over the public address system throughout the train when desired. In the observation car are four loud-speakers of the R. C. A. type with no separate volume controls for the individual speakers.

Coach seats are of the twin-revolving reclining-type, with aisle pedestal and wall mounting, center arm rests folding up between the backs, single-folding foot rests, sliding rubber cushions and spring backs. The seats at the bulkheads are similar in appearance to the revolving seats, but placed in a fixed position so they cannot revolve but recline as far as the space will permit. All coach seats are furnished by the Coach & Car Equipment Company, and are upholstered with Collins & Aikman's Chevelair material in a horizontal pattern of

appropriate colors.

Lounge chairs, diner chairs and lounge section settees are supplied by the General Fireproofing Company. Window shades in the main coach compartment have attractive horizontal patterns with a backing of Pantasote pebble-grained aluminum. Dodge Venetian blinds are used in the dining car and in the lounge-observation car. L. C. Chase portieres at the entrances to men's and women's lounge rooms and at the sectional division in the dining car add to the homelike atmosphere. Twelve tables in the dining car are of the fixed non-removable type supplied with a single brace against the car side. Dining table tops are made of Gunn line-treated Armstrong linoleum. In the coach lounge rooms and the observation room, the small tables have dull-finish, blisterproof Formica tops.

The car trucks are of the four-wheel, single dropequalizer type. The truck frames, bolsters and spring planks are of high-tensile, nickel cast steel, supplied by the General Steel Castings Corporation. The shock absorbers are Monroe one-way vertical type. There are rubber inserts for truck bolster stops, and rubber fillers



Four-Wheel Truck with Single Drop Equalizer

on top of the equalizer springs, shock absorbers and spring-plank stabilizing cushion. Swing hangers are of alloy steel, heat treated. The truck center plates are of cast steel, machined on the inside of the bottom wearing surface and at the flange edges for a tight fit between the retaining lugs on the truck bolster. This bearing is sealed to dust and an Alemite fitting facilitates lubrication. Side bearings are of the Drews Evertight-type.

The truck wheels are 36 in. rolled steel, multiple-wear, with 11-in, hub and 21/2-in, rim made to A. A. R. specifications, heat treated and with hub faces machined. The axles are normalized and tempered. Journal boxes are designed for the application of Timken roller bearings, operate in pedestals cast integral with the truck frame and are provided with guide liners made of 3/16-in. manganese steel. The clasp brakes are the Simplex unitcylinder, with two 10-in. by 8-in. cylinders per truck on all cars except the kitchen end of the diner which has 12-in. by 10-in. cylinders.

Partial List of Materials and Equipment on the Illinois Central

"City of Miami"		
Steel; steel wheels	Carnegie-Illinois Steel Corp., Pittsburgh, Pa.	
shapes	Aluminum Co. of America, Pittsburgh, Pa.	
lines	General Steel Castings Corp., Granite City, Ill.	
Truck helical springs	American Locomotive Company, Railway Steel Spring Div., New York.	
Simplex clasp brakes; side bearings	American Steel Foundries, Chicago.	
ment	New York Air Brake Co., New York. National Brake Co., Buffalo, N. Y.	

Partitions and doors Inside finish Dehydrated window sash....

Heating equipment and con-

Axle generator with Spicer drive

Wire and cable Lighting fixtures

Drinking water coolers..... Monel metal kitchen equip-

Coach seat upholstery Lounge and diner chairs.... Lounge seat covering; por-tieres Venetian blinds

Window cappings Composition flooring Air conditioning Overhead air-conditioning

Hand brakes ... National Brake Co., Buffalo, N. Y.

American Brake Shoe & Foundry Co., New York.

Journal roller bearings ... The Timken Roller Bearing Co., Canton, Ohio.

Vertical shock absorbers ... Monroe Equipment Co., Monroe, Mich. National Malleable and Steel Castings Co., Cleveland, Ohio.

Combined draft gear and Waugh Equipment Co., New York, Pullman-Standard Car Mfg. Co., Chicago. MacLean-Fogg Lock Nut Co., Chicago. Parker-Kalon Corporation, New York, Gustin-Bacon Mfg. Co., Kansas City, Mo. Johns-Manville Sales Corp., New York. buffer
Draw-bar centering device...
Lock nuts
Self-tapping screws
Insulation

Arch-type flooring; basket racks; pivoted-type steps... Steptreads Pullman-Standard Car Mfg. Co., Chicago. American Abrasive Metals Co., Irvington, N. J. N. J. Haskelite Mfg. Co., Chicago. Masonite Corporation, Chicago. Pittsburgh Plate Glass Company, Pittsburgh, Pa.

Pa. Caf-O-Lite Company, Muskegon, Mich. Tuco Products Corp., New York. Waukesha Motor Company, Waukesha, Wis.

Pullman-Standard Car Mfg. Co., Chicago Holmes Fan Co., Chicago. B. F. Sturtevant Co., Hyde Park, Boston, Mass.

Vapor Car Heating Co., Inc., Chicago. Union Asbestos & Rubber Co., Chicago. Edison Storage Battery Div. Thos. A. Edison, Inc., West Orange, N. J. Electric Storage Battery Co., Philadelphia, Battery charging receptacles. A. & J. M. Anderson Company, Boston, Mass.

Safety Car Heating & Lighting Co., New Haven, Conn.
Okonite Company, Passaic, N. J.
The Adams & Westlake Co., Elkhart, Ind.
Luminator, Inc., Chicago.
Safety Car Heating & Lighting Co., New Haven, Conn.
Pyle-National Company, Chicago.
Railway Devices Company, St. Louis, Mo.
Crane Company, Chicago.
Chase Brass & Copper Co., Inc., Waterbury, Conn.
Marquette Railway Supply Company, Chi-Marquette Railway Supply Company, Chicago.

Steel Sales Corporation, Chicago.
General Electric Company, Schenectady,
N. Y.
Chas. P. Cochrane & Co., Chicago.
Coach & Car Equipment Co., Chicago.

Firestone Tire & Rubber Co., Akron, Ohio. Goodyear Tire & Rubber Co., Akron, Ohio. Collins & Aikman Corporation, New York. General Fireproofing Co., Youngstown, Ohio.

L. C. Chase & Co., New York. H. B. Dodge & Company, Chicago.

Window-shade fixtures	Pantasote Company, Inc., New York. The Adams & Westlake Co., Elkhart, Ind. Armstrong Cork Co., Lancaster, Pa. Formica Insulation Company, Cincinnati, Ohio.
	Liquid Carbonic Company, Chicago. Murphy Varnish Company, Newark, N. J. Sherwin Williams Company, Cleveland, Ohio.

The "Dixie Flagler" Assigned To Chicago-Miami Service

(Continued from page 933)

The diner departs somewhat from the unifying gray tones of the chair cars, with its walls of deep blue, its ceiling of mist white and buff tan, and its blue-upholstered chairs. In the tavern-lounge the wainscot is in a light gray brown with grayed white upper side walls,

and burnt yellow ceiling.

One of the distinctive features of the decorations of the Flagler coaches are the flying gulls in metal relief against the wood finish of the bulkheads. Drapes are hung at the windows of all of the cars in this train.

Motive power for the Dixie Flyer is furnished by each of the railroads which make up the route of the train between Chicago and Miami. On the Chicago & Eastern Illinois, the Louisville & Nashville, the Nashville, Chattanooga & St. Louis, and the Atlanta, Birmingham & Coast the steam locomotives assigned to this train have been streamlined and specially decorated. The train will be moved over the Florida East Coast by the Diesel-electric locomotive originally purchased with the train.

From Michigan Boulevard To Biscayne Bay in 29½ Hours

(Continued from page 931)

who broke a bottle of orange juice on the observation end of the train in the company of seven girls from Florida, Evansville, Terre Haute and Danville. J. B. Ford, vicepresident of the C. & E. I., and Edward G. Budd were the speakers at the christening

The City of Miami was exhibited at the Van Buren street station of the I. C. on December 17 and was christened prior to departure on the following day. Participating in the ceremonies, which were broadcast over radio station WMAQ, were Charles A. Liddle, president of the Pullman-Standard Car Manufacturing Company; J. L. Beven, president of the I. C.; James A. Dunn, commissioner of Miami and nine girl guest guides from Miami, including Miss Miami of 1941 and the Florida "glamour girl" of 1940. Charlotte Beven, daughter of J. L. Beven, christened the train with water from Biscayne Bay.

The South Wind was exhibited at the Union Station on December 16, amidst orange branches and the perfume of orange blossoms. It was christened on December 19, with champagne by Miss South Wind, a young lady from Oak Park, Ill., who, with two girls from Miami, were attired in summer clothes. The latter girls accompanied the train on its first trip south, carrying a letter of greeting from the mayor of Chicago to the mayor of Miami. H. E. Newcomet, vice-president of the Western region of the Pennsylvania, E. J. Kelly, mayor of Chicago, and Samuel M. Felton of the Budd Company took part in the ceremonies. At Indianapolis, Ind., and Louisville, Ky., this train was met by the governor, mayor and members of the chamber of commerce, while welcoming parties also greeted the train at Nashville, Birmingham, Montgomery, Jacksonville and

The Pennsylvania "South Wind"



Budd-built train of seven cars seats 258 —Hauled by a streamline steam locomotive

THE "South Wind," the Pennsylvania's all-chair train which departed on its initial trip between Chicago and Miami, Fla., on December 19, is made up of streamline cars built by the Edward G. Budd Manufacturing Company. The exteriors of the cars are finished in the Pennsylvania tuscan red with gold striping and lettering. Two K4s Pacific type locomotives, streamlined at the Altoona works of the railroad and finished in a green-black relieved by highlights of chromium and gold, are available for hauling the train in and out of Chicago.

The make-up of the train consists of a combination passenger-dormitory-baggage car, four coaches, a diner, and an observation-lounge car. All of the cars, except the diner, have vestibules at one end only. The diner has no vestibules. All cars are 85 ft. long, coupled, and the truck centers are 59 ft. 6 in. apart. The cars have a clear inside width of 9 ft. $3\frac{1}{2}$ in. The weights are shown in a table. The cars for the train are fabricated of stainless steel by the Shotweld process.

The windows are Pennsylvania designed double-glazed, full-swing sash of safety plate glass. These sash are attached to the car at the top by hook hinges and secured in place against an outside rubber seal by four screws in an apron at the bottom of the sash which extends down over the window sill.

The Passenger-Dormitory-Baggage Car

The first car of the South Wind is the passenger-dormitory car with a baggage compartment 24 ft. 5 in. long at the front end. At the forward end of the baggage room is an auxiliary water storage of 700 gallons in two tanks. To the rear of this compartment are the dining-car crew's quarters which include a dormitory with 15 berths, a complete washroom with showers, and lockers for the use of the steward and the crew. The steward's room, containing an upper and a lower berth, adjoins the passenger compartment and may be used as an office.

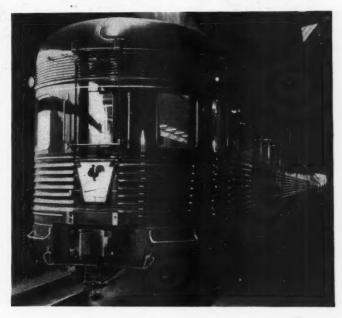
The passenger compartment, containing 18 seats (12 reclining) of the type used throughout the train, is decorated in the same motif used in the 60-passenger chair cars.

In the 60-passenger coaches the rotating chairs have

individual reclining backs and folding center arms. The rotating bases are of the railroad's own design. Bag racks are continuous on each side of the car. Between the women's lounge bulkhead and the back of the first seat is a 19½-in. low luggage compartment. A water-cooler cabinet and drinking fountain is placed against the bulkhead at the opposite end of the aisle.

The men's and women's lounges, one at each end of the car, are 7 ft. 2 in. long. Each is fitted with three lavatories and an upholstered sofa which will seat three persons. A folding shelf in the back of the sofa is a convenience when the lounges are being used as dressing rooms in the morning. There are mirrors above the lavatory and over the backs of the sofas and in the toilet doors. On the bulkhead in the women's lounge there is also a small dressing table, with mirror and chair.

Styling and decorative features of both interiors and exteriors are by Raymond Loewy. Throughout the train soft gray is used as the predominating and unifying color on the car interiors. In varying tones it appears on the





A Coach Interior

fascia and pier panels of the coaches and in the cove and dado of the dining and observation-lounge cars. Accents of wine, burgundy, blue, and yellow give character to the neutral background. There are sufficient lights in the seat pedestals to light the aisle when the overhead lights are dim or turned out.

In the coaches the pier panels and fascia are dark gray and the wainscoting seal brown. Opalescent lacquer is used in the center ceiling between the air outlets and on the end partitions. The side ceiling is in pale yellow with a bright yellow stripe over the windows. The upholstery is a soft shade of brown with diagonal striping and the horizontally striped roller curtains are also in brown tints. The floor is linoleum, sand jaspe with terra cotta striping. Rectangular mirrors with oval corners, centered on the aisle, are placed against the bulkheads at each end of the passenger compartment.

The coaches are lighted from Pennsylvania standard

center ceiling fixtures. These lights are arranged in several circuits, including one for dimming during the night.

The Dining Car

The 48-passenger dining car, which is located in the middle of the train, follows essentially the same interior arrangement as that employed in the 15 dining cars purchased by the Pennsylvania from three builders in 1939.*

There are six tables on each side of the car. Those on one side have drop leaves and can be set either for two or four persons. The chairs have aluminum frames and 12 can be folded and stored when the drop-leaf tables are set for two persons each.

The diners have an overtone of gray, shades of which are used on the wainscoting and ceilings. The burgundy carpet and patterned draperies give character to the interior and a luminous note is added by the use of opalescent gray lacquer for the venetian blinds and bulkheads. The mirrors, and the bar window, in the bulkheads are set in white reveals. The upholstery of the dining chairs is a soft gray.

Other striking centers of interest in this car are the brilliantly colored and amusing cartoons of scenes peculiar to the south, particularly to the Florida resort region, which are applied in plastic relief on the gray Formica pier panels.

The dining room is lighted by center ceiling fixtures and semi-indirect lighting behind longitudinal side troughs above the windows. The light outlets above and below the troughs are covered with a diffusing plastic.

The Lounge-Observation Car

At the rear end of the train is the buffet-loungeobservation car. In the solarium—the semi-circular observation end—and the main lounge section are 35 deeply cushioned, roomy chairs. They have light satin-finish aluminum frames and the passengers may readily ar-

*For a complete description of these cars see the Railway Age for September 30, 1939, page 469.



In the Lounge of the South Wind



Observation Room of the South Wind

range them to suit themselves. The radio cabinet in the lounge can be controlled by the passengers.

Forward of the lounge is the club section seating 16 persons at four tables. Adjoining it is a small, but completely appointed, kitchen-buffet in which there is

Weights of the Coaches in the Pennsylvania South Wind (Lb.)

	Dry	Ready to run	Normal maximum load
Passenger-dormitory-baggage car	110,750*	120,355*	136,115*
60-passenger coach (four)	111,685	114,190	123,790
Diner	120,270*	131,400*	140,250*
Lounge-observation car	110,570	116,000	124,800

a small coal range. From this light meals and refreshments of all kinds are served. It supplements the dining-car service and remains open as long as required after the diner closes in the evening.

The solarium, or observation-lounge, has a lower ceiling than the body of the car, and this is treated in the same light gray as the walls in the entire car. The windows in the curved walls of the solarium have draperies of light blue with a white and gray baroque pattern. The chairs, both in this section and in the main lounge, are upholstered in two light-gray mohair fabrics. The carpet is a deep mulberry patterned in a lighter shade of the same color. The built-in seats of the club section are upholstered in mulberry mohair to match the carpet. The seats are on either side of tables with tops inlaid in rubber decorated with designs appropriate to Florida.

The lower walls of the entire car are a medium gray topped by a light gray on the upper walls. The side ceilings of the club and lounge sections are in pale yellow with the center section white. The inside of the window shades take on the color of the carpet.

The main lounge and club sections have both center ceiling and side lighting. In the club section the side lighting is semi-indirect from troughs above the windows covered top and bottom with a diffusing plastic. In the main lounge transverse fixtures of opalescent glass

are set in the under side of the luggage rack wall brackets.

There are center ceiling fixtures in both of these sections. These fixtures are also placed in the ceiling around the outside and across the front of the solarium section.

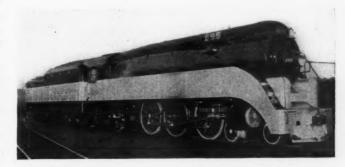
Mechanical Equipment

The air-conditioning equipment is the electro-mechanical type. The compressor and condenser units, mounted underneath each car, are of eight tons' capacity. The overhead evaporating equipment is of eight tons' capacity on the coaches and on the observation-lounge car, and of five and one-half tons' capacity on the diner and passenger-dormitory-baggage car.

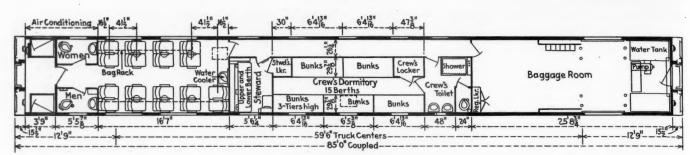
Power for air conditioning and lighting is furnished by a 20-kw. G. E. generator and Spicer drive. G. E. voltage control is also installed. Batteries are Edison 32-volt with a capacity of 1,250 amp. hrs.

The cars are heated partly from fin-tube floor radiators and partly through the air-conditioning system. The temperature control is effected by the Fulton-Sylphon system.

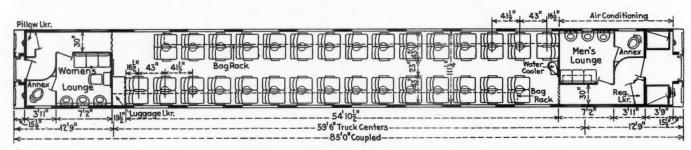
The four-wheel trucks have a 9-ft. wheel base. The



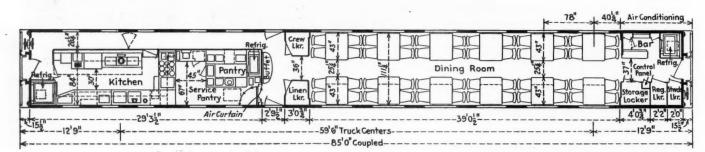
The L. & N. Locomotive Which Hauls the South Wind Between Louisville, Ky., and Montgomery, Ala.



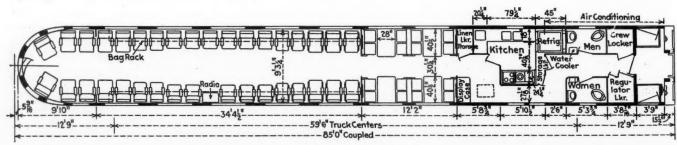
The Passenger-Dormitory-Baggage Car



One of the Coaches of the Pennsylvania Chicago-Miami Train



The Diner



The Lounge-Observation Car

frames are nickel-steel castings. The trucks are the double-equalized type with silico-manganese coil springs and chrome-vanadium elliptic springs. Sound-deadening pads are placed under and over the coil and elliptic springs and on the transom wear plates. They are also applied on the truck brake-rod supports. The 36-in. multi-wear steel wheels are mounted on 5½-in. by 10-in. axles running in Timken roller-bearing journal boxes. Shock absorbers control side sway.

absorbers control side sway.

The air-brake equipment is the Westinghouse full HSC type with speed governors and a maximum braking ratio of 250 per cent. Truck clasp brakes are the American Steel Foundries unit-cylinder type.

The cars are equipped with A. A. R. tight-lock couplers and double-acting rubber draft gears. The ends of the cars are fitted with inside and outside diaphragms. The inside diaphragms are the telescoping

type; the outside are of rubber stretched by spring tension against the hinged side sections of the diaphragm face plate.

The South Wind a Steam Train

The South Wind, except for the last stage of the journey from Chicago to Miami over the Florida East Coast, is a steam train. Streamlining has been applied to two K4s Pacific type locomotives, one of which will always be available for movements of the South Wind over the Pennsylvania. The green-black finish is relieved with chromium plate and gold striping, the latter harmonizing with similar decorations on the sides of the cars.

The Louisville & Nashville, which receives the train from the Pennsylvania, has also allotted a streamline locomotive for this run.

Between Jacksonville, Fla., and Miami, over the

Florida East Coast, this and the other two Chicago-Miami coach trains are moved by the Diesel-electric locomotive formerly assign

Partial List of Materials an

Trucks	Genera Carneg Nation Clev
Sheets; wheel and axle assemblies	Bethlel The T
Buffer sill castings Face plate and buffer spring.	Americ Wm. 8
Shock absorbers	Pa. Houde Americ Westin Pa.
Miscellaneous rubber mountings Miscellaneous castings	Quaker Crucib Dodge Lukens Philad
Stepwell tread plates Safety gate hooks	Alan V Allegh Pa.
Trap-door hinges	O. M. Gustin Spauld wand
Vestibule diaphragm and curtain Rubber diaphragm Cork strips and sheets; roofing felt Ceiling door panels Bonded metal panels Fascia board; snap-on moulding	The A United Armstr Haskel H. H. Dahlst
Sash and sash assemblies; rubber retainers; weather-strip	The A Fabree United H. S. Philad
Bolts, nuts, rivets, screws, etc.	delpl Wm. I Maddo Shaker
Sheet steel (carbon)	The A Bohn Micl
Venetian blinds	H. B. The P Transp

e moved by the Diesel-electric igned to the Henry M. Flagler.	Di Di Cl
and Equipment on the Pennsylvania South Wind"	Ta
General Steel Castings Corp., Eddystone, Pa. Carnegie-Illinois Steel Corp., Pittsburgh, Pa. National Malleable and Steel Castings Co., Cleveland, Ohio.	M Bi Ki St
Bethlehem Steel Co., Bethlehem, Pa. Che Timken Roller Bearing Co., Canton, Ohio,	Ic M
Ohio. Treadwell Engineering Co., Easton, Pa. American Steel Foundries, Chicago. Vm. & Harvey Rowland, Inc., Philadelphia, Pa.	A: R:
Houde Engineering Corp., Buffalo, N. Y. American Steel Foundries, Chicago. Vestinghouse Air Brake Co., Wilmerding, Pa.	Do Gr K
Quaker City Rubber Co., Philadelphia, Pa. Frucible Steel Co. of America, New York. Jodge Steel Co., Philadelphia, Pa. Jukens Steel Co., Coatesville, Pa. Philadelphia Non Ferrous Foundry, Philadelphia	A
Man Wood Steel Co., Conshohocken, Pa.	Ai Ei Bi
Pa. D. M. Edwards, Inc., Syracuse, N. Y. Gustin-Bacon Mfg. Co., Kansas City, Mo. Spaulding Fibre Company, Inc., Tona- wanda, N. Y.	Fi
The Adams & Westlake Co., Elkhart, Ind. United States Rubber Co., New York.	V ₁
Armstrong Cork Co., Lancaster, Pa. Haskelite Mfg. Corp., Chicago. H. H. Robertson Co., Pittsburgh, Pa.	Pi
Oahlstrom Metallic Door Co., Jamestown, N. Y.	D
	Pi
The Adams & Westlake Co., Elkhart, Ind.	So
H. S. Getty & Co., Inc., Philadelphia, Pa. Philadelphia Non Ferrous Foundry, Phila-	Li
The Adams & Westlake Co., Elkhart, Ind. Fabreeka Products Co., Boston, Mass. United States Rubber Co., New York. 1. S. Getty & Co., Inc., Philadelphia, Pa. Philadelphia Non Ferrous Foundry, Philadelphia, Pa. Wm. H. Haskell Mfg. Co., Pawtucket, R. I. Maddock & Company, Philadelphia, Pa. Philadelphia	E
	Li
The Adams & Westlake Co., Elkhart, Ind.	
Bohn Aluminum & Brass Corp., Detroit,	Re
Mich. H. Dodge & Company, Chicago. The Pantasote Co., Inc., New York. Transportation Seat Co., Chicago.	Pa

Seat bases	Altoona Works, Penna R. R. Heywood-Wakefield Co., Gardner, Mass.
Upholstery, lounge and dining room chairs Dinette table and seat parts. Dinette seats	L. C. Chase & Co., Inc., New York. Haskelite Mfg. Co., Chicago. S. Karpen & Bro., Inc., Chicago. General Fireproof Company, Youngstow
Chairs	Ohio.
Table tops	The Formica Insulation Co., Cincinna Ohio.
Mattresses Bunk insulation pads Kitchen and bar equipment. Steward's room equipment.	United States Rubber Co., New York. Colonial Bedding Co., Philadelphia, Pa. Union Asbestos & Rubber Co., Chicago. Angelo Colonna, Philadelphia, Pa. Jas. L. Howard & Co., Hartford, Conn. H. S. Getty & Co., Inc., Philadelphia, P Henry Giessel Co., New York. Frigidaire Div., General Motors Cor
Ice water cooler Mechanical water coolers	
Ash receivers	Dayton Mfg. Co., Dayton, Ohio. Philco Radio & Television Corp., Philacophia, Pa.
Fire extinguishers and brackets Decalcomanias	Pyrene Mfg. Co., Newark, N. J. National Decalcomania Corp., Philadelph Pa.
Grilles Kitchen exhaust grille Air conditioning	A. H. Blaker Co., Chicago. Diamond Mfg. Co., Wyoming, Pa. Frigidaire Div., General Motors Corp., D ton, Ohio.
Anemostat, steward's room; fin radiation; extension stem handwheels	The Fulton-Sylphon Co., Knoxville, Tenn Johns-Manville Sales Corp., New York. B. F. Sturtevant Co., Hyde Park, Bost Mass.
Blower fans	B. F. Sturtevant Co., Hyde Park, Bost Mass. Ward Leonard Electric Co., Mount V non, N. Y.
Fin radiation for air curtain; valve operating mechanism. Ventilator grilles	Vapor Car Heating Co., Inc., Chicago. Tuttle & Bailey, Inc., New Britain, Co Chase Brass & Copper Co., Inc., Waterbu
Plumbing supplies Pipe and fittings	Conn. Crane Co., Chicago. Chase Brass & Copper Co., Inc., Waterbu
	Conn.
Pipe covering	Crane Co., Chicago. Hajoca Corporation, Philadelphia, Pa. Keasby & Mattison Co., Ambler, Pa. Union Asbestos & Rubber Co., Chicago. West Disinfecting Co., Long Island Ci
Soaparatus tanks	N. Y. Thomas A. Edison, Inc., West Orange, N.
Batteries Lighting generators with Spicer drive; lighting control.	General Electric Company, Schenecta
Electric supplies (conduit, receptacles, etc.)	Colonial Electric Co., Philadelphia, Pa.
Lighting fixtures	Colonial Electric Co., Philadelphia, Pa. Shakeproof Products Co., Kalamazoo, Mi The Adams & Westlake Co., Elkhart, I. Luminator, Inc., Chicago. Safety Car Heating & Lighting Co., N York.
Resistor	Ward Leonard Electric Co., Mount V
Conductor's cord conduit	Ward Leonard Electric Co., Mount V non, N. Y. Anaconda Wire & Cable Co., New York Dolphin Paint & Varnish Co., Toledo, Ol Murphy Varnish Co., Newark, N. J.

ase & Co., Inc., New York. Mfg. Co., Chicago. n & Bro., Inc., Chicago. Fireproof Company, Youngstown, mica Insulation Co., Cincinnati, States Rubber Co., New York.
Bedding Co., Philadelphia, Pa.
sbestos & Rubber Co., Chicago.
olonna, Philadelphia, Pa.
loward & Co., Hartford, Conn.
etty & Co., Inc., Philadelphia, Pa.
itessel Co., New York.

Div., General Motors Corp.,
Ohio.
4fg. Co., Dayten, Chicago. fg. Co., Dayton, Ohio. adio & Television Corp., Philadel-Ifg. Co., Newark, N. J. Decalcomania Corp., Philadelphia, aker Co., Chicago. Mfg. Co., Wyoming, Pa. Div., General Motors Corp., Day-nio. on-Sylphon Co., Knoxville, Tenn. nville Sales Corp., New York. urtevant Co., Hyde Park, Boston, urtevant Co., Hyde Park, Boston, eonard Electric Co., Mount Verr Heating Co., Inc., Chicago. Bailey, Inc., New Britain, Conn. ass & Copper Co., Inc., Waterbury, ., Chicago. ass & Copper Co., Inc., Waterbury, o, Chicago.
Corporation, Philadelphia, Pa.
Mattison Co., Ambler, Pa.
Shestos & Rubber Co., Chicago.
Sinfecting Co., Long Island City, A. Edison, Inc., West Orange, N. J. Electric Company, Schenectady, Electric Co., Philadelphia, Pa. of Products Co., Kalamazoo, Mich. ms & Westlake Co., Elkhart, Ind. r, Inc., Chicago. ar Heating & Lighting Co., New eonard Electric Co., Mount Ver-Y. Wire & Cable Co., New York. Paint & Varnish Co., Toledo, Ohio. Varnish Co., Newark, N. J.



One of the South Wind Coaches



Construction View of the Bridge Alterations, Showing the Detour Track. Note That the Section of the New Steel That Was Erected to One Side Has Been Rolled Into Position and That the Displaced Simple Span Has Been Moved to Its New Location

Cantilever Introduced in This Simple-Truss Bridge

Gives best solution to problem of increasing the length of Gulf Coast Lines structure across Atchafalaya river to accommodate wider channel

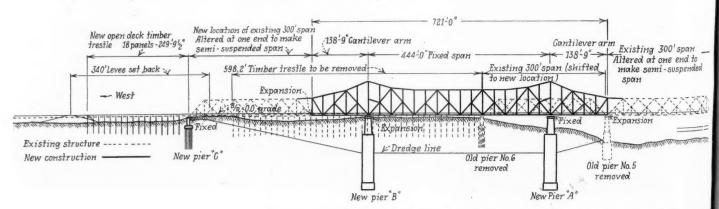
By Harry J. Engel

Assistant Engineer, Modjeski and Masters, Harrisburg, Pa. 17

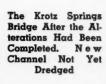
HEN it became necessary recently to lengthen the single-track simple-span bridge of the Gulf Coast Lines (part of the Missouri Pacific System) across the Atchafalaya river, a tributary of the Mississippi, at Krotz Springs, La., to accommodate a wider channel in the river, this was accomplished by introducing at one end of the existing structure 721 ft. of new steel structure, comprised of a fixed anchor span and two cantilever projection arms, with the adjacent simple spans suspended from the ends of the projection arms. To carry out this project, a section of the new structure was

erected alongside the westerly end span in the bridge and then rolled laterally into position simultaneously with the shifting of the existing span to one side, this operation being carried out between trains.

The displaced span was later moved longitudinally to a position at the opposite end of the new section, where it was reincorporated in the bridge as the most westerly span. The remainder of the new steel was erected in the final location while traffic was carried on a detour track. This project is also of interest because of a special three-well design that was used for the two new piers



Elevation of the Krotz Springs Bridge, Showing How It Was Lengthened





that were required, the object of this design being partly to facilitate dredging operations where one of the piers was constructed directly under an existing span.

History of Bridge

The original bridge at Krotz Springs, which dates from 1907, embodied a 300-ft. swing span flanked by two simple through-truss spans of the same length. At each end of the structure there was an open-deck timberpile approach trestle. Shortly after the construction of the bridge, the west bank of the river became eroded to such an extent as to require the addition at that end of another 300-ft. simple span. No further alterations were made in the bridge until the recent lengthening project was carried out. In 1928, following the disastrous floods that had occurred in the previous year, during which the water in the river rose above the bottom chords of the Krotz Springs bridge, Congress enacted legislation providing for the construction of extensive flood control works in the valleys of the Mississippi and its tributaries. In 1936, this legislation was amended to provide for doubling the width of the Atchafalaya River channel and to authorize funds to defray the cost of any alterations to bridges that might become necessary as a result of the It was this amendment that brought channel work. about the necessity of lengthening the bridge at Krotz Springs.

Preliminary Studies

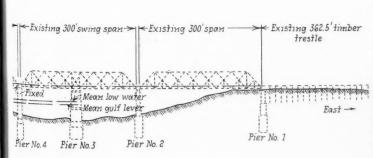
In 1937, the firm of Modjeski and Masters and the J. F. Coleman Engineering Company were engaged as consulting engineers to the Gulf Coast Lines to prepare

studies and comparative estimates of the cost of different methods of lengthening the bridge, the cost of the alterations to be borne by the Corps of Engineers, United States Army. A plan for lengthening the bridge that had been given consideration until this time called for the addition of two more simple spans to the west end, but this was found to have two important disadvantages.

In the first place, it was considered that caisson piers carried to a depth of 140 ft. below Gulf level would be necessary in the area beneath the channel extension, and this plan would require the construction of expensive piers of this type at three points, two of them at the locations of existing Piers 5 and 6 (see accompanying drawing). In the second place, the existing simple spans that were supported by Piers 5 and 6 would have to be supported on temporary falsework while these old piers were being removed and the new deep caissons were being sunk in their place. This work would have involved serious hazards, especially in view of the fact that it would have been necessary to maintain traffic over the existing spans while the substructure work was in progress.

To avoid these disadvantages the plan that is described in this article was conceived. This scheme offered the advantage that it entailed the construction of only two deep caisson piers, both of which would be clear of existing piers. Also it was more readily adaptable to the use of methods of procedure that would help to simplify the construction problem and would entail considerably less hazard. Finally, comparative estimates of cost showed that the adopted plan could be carried out at a saving in cost of 15 per cent as compared with the original plan,

Details of the final scheme are shown on the accompanying elevation of the bridge. As indicated on this



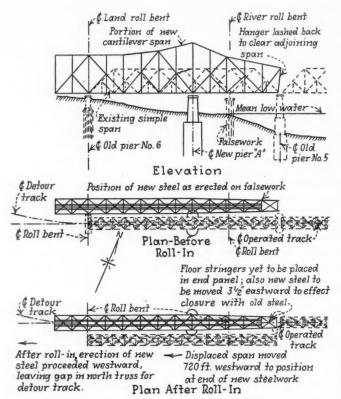
by the Introduction of the Cantilever Span



View of a Portion of the New Steel, Showing the Gap That Was Left in the North Truss for Carrying the Detour Track

drawing, the addition to the structure embodies a 444-ft. fixed span which serves as the common anchor arm for two 138-ft. 9-in. cantilever projections, with two of the existing 300-ft. simple spans suspended from these projections. The first step in the plan was to sink the new caisson Pier A beneath the most westerly existing span, after which a 300-ft. section of the new steelwork was erected alongside this span and rolled into a position of support on the new pier while the simple span was being rolled out on the other side, all without interruption to railway traffic. The remainder of the structure was built while traffic was detoured on a temporary timber trestle, which was erected in the clear of the construction operations on the other new piers and of most of the new steel-erection work.

In part to facilitate the dredging operations involved in sinking Pier A, which was located directly beneath



Diagrammatic Sketch, Showing How Part of the New Steel Was Erected on Falsework and Then Rolled Into Position to Replace an Existing Span, Which Was Then Shifted to Another Location in the Bridge

the existing steel, a three-well type of pier was designed, which was of such a length that dredging in the two outer wells could take place entirely outside the limits of the existing steelwork. This design was also used for Pier B. The wells were carried up into the shafts of the piers, so that the entire piers are in effect caissons, capped with thick concrete slabs. The piers were founded in a stratum of coarse sand, and elaborate jetting and sounding-well systems were devised to facilitate the work of sinking them, the subsoil consisting of this material and silty clay. The dredging of the new river channel by the federal government was not undertaken until all of the bridge alterations had been completed.

The detour trestle was built simultaneously with the construction of Pier A, and as soon as traffic had been diverted over it work was undertaken on Pier B. Both of the deep piers were sunk and sealed without important incident, slight tendencies toward tilting being quickly

corrected by localized jetting and by the application of cable pulls and timber kickers. Both piers were founded in a truly vertical position.

High water caused almost two months delay in the construction of a new pile pier that was required at the extreme west end of the new structure, but otherwise resulted in no trouble. Other substructure work consisted of the removal of old Piers 5 and 6, this work being carried out by light blasting after the superstructure loads of the old bridge had been removed from them.

Erection of Superstructure

The first step in the construction of the new superstructure was the erection of the steel for that portion of the cantilever structure that was to be rolled in to replace the most westerly existing span. In this phase of the work the initial step was to provide two timber-pile falsework bents for supporting the new steel while it was being erected. One of these bents was placed opposite old Pier 6 and the other opposite the far quarter-point of the 300-ft. span that was to be replaced in the rolling-in operation. Extensions of the bents were used for the rolling-in operation, and they were each provided with a suitable runway for this purpose.

One of the accompanying drawings shows diagrammatically how the new steel was rolled in to replace the simple span which was simultaneously rolled out of position. For carrying out this work, the time interval was chosen between the arrival of the eastbound passenger train at Krotz Springs at 3:47 a. m. and that of the westbound passenger train at 12:23 p. m., this being the longest interval between trains during the day. Immediately after the morning train had passed on the day the shift was made, railroad forces broke the track and also removed a sufficient amount of the old approach trestle to provide clearance for a section of the new steel that projected beyond Pier 6.

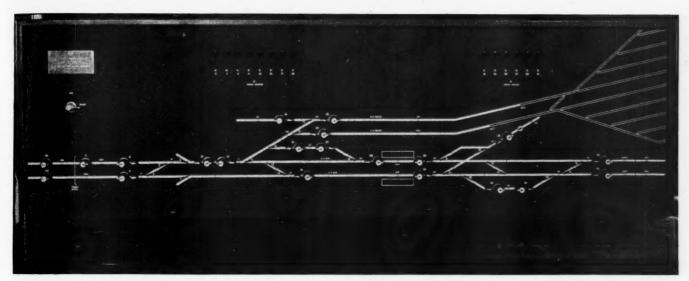
Careful preparations had also been made otherwise, and the old 300-ft. span had already been jacked up at Pier 6 and mounted on the roll beams. This span was now also jacked off its support at the opposite end (Pier 5) and brought to bearing on the roll beams of the bent near that end. The old and new steel were firmly blocked together, and by the application of cable pulls at the two roll bents, actuated by a locomotive crane and a shore engine, they were made to roll as one unit. The roll-in was begun at 7 a. m., and by 7:30 a. m. the new steel was on the alinement of the old bridge.

Longitudinal Move Necessary

The new steel, however, could not yet be mounted on the shoes at Pier A because it had to be moved $3\frac{1}{2}$ in. longitudinally toward the east to effect a closure with the adjoining simple span; also it was necessary to place the floor stringers in the panel between the two spans. Preparations for the longitudinal shift included the placing of nests of small diameter rollers on top of the shoes at Pier A, after which the new steel was jacked vertically to land on these rollers. After the small longitudinal roll had been effected the steel was again jacked vertically to permit the rollers to be removed.

Because the river roll bent (that near Pier 5) was thus having heavy loads alternately applied and relieved, considerable elastic shortening and lengthening of its piles was taking place, and the required range of the jacking to allow for this movement was greater than had been anticipated and consumed more time. After the new steel had been landed on the shoes at Pier A, some additional vertical jacking of the ends of the span was re-

(Continued on page 954)



The New NX Interlocking Control Machine Is Located in the Operator's Office in the Windsor Station,

Michigan Central Installs New Interlockings at Windsor, Ont.

Modern entrance-exit and miniature-lever all-relay control systems replace lever-control machines with mechanical locking.

THE Michigan Central has extensive track facilities at the east end of the double-track tunnels under the Detroit river at Windsor, Ont., including three main-line crossovers, turnouts leading from the double-track main line to the freight yards, a junction with the Canadian Pacific and special sidings to facilitate changing from steam to electric locomotives. The switches and signals in these track layouts have been controlled from two lever-type interlocking machines. In a new arrangement that was placed in service recently, one new NX entrance-exit type interlocking machine controls the switches and signals on the main line throughout Windsor, while the switches and signals at the east end of the electric freight yard are controlled remotely by a miniature-lever machine, located in an existing interlocking tower at the opposite end of that yard.

The Michigan Central operates 25 passenger trains and approximately 43 freight trains daily through Windsor, in addition to 6 passenger trains of the Canadian Pacific which move daily over the Michigan Central between Windsor and Detroit. The Canadian Pacific line from Toronto, Ont., enters the northeast portion of the Windsor layout and connects with the tracks along the north side of the west end of the Electric Yard. When using the main line tracks for station stops at Windsor, these Canadian Pacific passenger trains are routed over the lead between the yard and the main line east of signals 30 and 32. When the main tracks at the station are occupied, the Canadian Pacific trains use either of the two freight trains north of the north platform, and in such instances these trains move to and from the main line through the turnouts and crossovers west of the platform.

In order to permit a track gang to work on one

track or the other inside the tunnels, the track layout and the signaling at Windsor were designed to permit trains to be operated in either direction on either track through the tunnels, traffic locking being provided for the control of the signals, as will be explained later.

Operating Problems

Another important phase of the operations at Windsor is the necessity for changing locomotives. Electric locomotives are used for the 2.7 miles through the tunnels between Windsor and Detroit, and steam locomotives beyond those limits. The locomotives for passenger trains are changed while the trains are standing at the station platform. The siding and switches west of the platforms are used for changing locomotives on west-bound trains, and the special locomotive siding east of signal 30 is used when changing locomotives on eastward trains. Numerous extra lineups of the interlocking are required to get the locomotives on and off these sidings, and off and on the passenger trains.

Eastbound freight trains are pulled from Detroit by electric locomotives, and then routed over crossover No. 5 and turnout switch 11 to the freight track and thence into the Electric Yard. From this yard, steam locomotives pull the trains through Tower 3 interlocking to the freight classification yard or onto the main line eastward. Likewise, westbound freight trains are pulled into the Electric Yard by steam locomotives, and electric locomotives then pull the trains through Windsor and to Detroit. An additional complication in the operations is the necessity for all passenger trains to stop at Windsor while customs and immigration inspections are made. The duration of these inspections cannot be de-

termined in advance, and if the delay is too long, other trains may have to be run around. Therefore, crossover arrangements are provided to permit such moves.

Previous Interlockings

At the time the tunnels were completed in 1907, two General Railway Signal Company lever-control electric interlockings were installed at Windsor to handle the switches and signals. Tower 1, which handled the area from the east end of the tunnel to Windsor station, had 33 working levers to control 5 switches, 5 crossovers, 1 derail, 20 signals and 2 check lock levers. Starting near the west end of the Windsor layout, the tracks descend toward the tunnels on a 1.5 per cent grade. To protect against the possibility that a car might get away and drift back toward the tunnels, a Wharton type derail was installed on the eastward track just east of the eastward home signal. To provide derail protection for



View Looking East With Signal 4 at the Right and Signal 6 at the Left.

the westward track a switch, which was removed during recent track changes, was set normally for the turnout.

Tower 2, which controlled the area east of the station, including the leads to the yard, had 38 working levers to control 14 switches, 2 crossovers and 22 signals. A

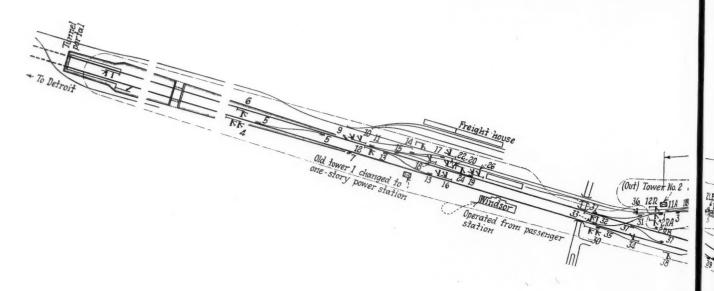
mechanical interlocking, Tower 3, was installed at the east end of the Electric Yard to control the switches and signals at that layout.

In August, 1939, the 600-volt d-c. traction circuit was accidentally connected to some of the interlocking circuits, and the control machine, wiring and accessory apparatus in Tower 1 were so seriously damaged that the plant was out of service. As a temporary measure, hand-throw switch stands were installed to operate the switches, and the signals for directing routes were controlled by circuits properly selected through switch circuit controllers, signal-repeater relays and a set of knifeswitch levers mounted on a panel in the switch-tender's house. Not only because of the damage done by the fire at interlocking Tower 1, but also due to the fact that the old plants needed extensive replacements, a decision was made to reconstruct the interlockings throughout Windsor, and also to provide more modern types of control machines.

An Analysis of Operations

An analysis of the operations showed that the handling of trains through the passenger station area, including the changing of locomotives on passenger trains, as well as the routing of freight trains off or onto the main line, all fell in one operating category, and, therefore, might better be controlled by one man, rather than in part by each of two men. On the other hand, the routing of freight trains into and out of the west end of the Electric Yard had to be co-ordinated with the operation of the east end of this yard which was handled by interlocking Tower 3. The logical solution, therefore, was to provide an entirely different arrangement of interlocking control limits, and to use modern interlocking control machines and systems of circuits.

A new NX interlocking machine in the office of the station at Windsor now controls the switches, derails and signals formerly included in the Tower 1 interlocking, and also the main line crossovers, locomotive interchange track switches, and turnouts leading to the Electric Yard, which were formerly included in Tower 2 interlocking. The remaining switches and signals at the west end of the Electric Yard, which were formerly in Tower 2 interlocking, are now controlled from a miniature-lever interlocking machine in Tower 3 at the east end of the Electric Yard. The upper story of the



Track and Signal Plan of the Entire

old Tower 1 was removed, and the lower story was rehabilitated as a one-story building for housing switching apparatus for the electric traction system. The old Tower 2 was removed.

When changing over to the new interlockings, several minor changes were made in the track layout, the accompanying plan showing the layout now in service. As a part of the improvements, the Wharton type derail on the eastward track was replaced with a Hayes-type derail, and a similar derail was installed on the westward track. The two new derails are operated by switch machines as a part of the interlocking.

New Signals Installed

The old interlocking signals of the semaphore type were replaced with searchlight type signals with quick-detachable plug-in type connections. As the masts for the old high signals were badly rusted where they were clamped in cast-iron bases, the deteriorated sections were cut off, and the masts were set down in concrete foundations which were poured in place. Thus, the new high signals are on masts much lower than the old ones, but are now at the proper height to be approximately in line with an engineman in the cab of a locomotive. At locations where adequate clearance was available, the dwarf signals were mounted on masts high enough to bring the center of the lens 6 ft. above the level of the top of the rail.

Signaling Arrangements

The signaling arrangement for the new plant was designed with two purposes in mind; (a) to provide for all the special train movements and the changing of locomotives, as well as for run-around moves; and (b) when a high "arm" aspect could not be given, to provide other proceed aspects which would authorize train movements at the highest possible speeds consistent with safety in consideration of the occupancy of track sections ahead. In other words, it is not required that a train move at caution-slow-speed through an extended distance when conditions are safe for medium speed or better.

Whereas some of the high home signals on the old plants had three arms, the maximum on the new signals is two "arms." Each high home signal for right-hand running, such as signals 4, 26, 30 and 42, has two operative "arms," the top "arm" governing through moves on straight track while the lower "arm" governs diverging moves. The lower "arms" operate to three aspects so that a green aspect can be displayed if the

two "blocks" ahead are unoccupied, thus giving enginemen additional information as compared with a twoaspect "arm." These lower arms can also be used to display a "call-on" aspect, which in all instances is yellow-under-red. This aspect is also displayed when signals govern into non-track-circuited territory.

Three-position signals are used for the backup dwarfs,



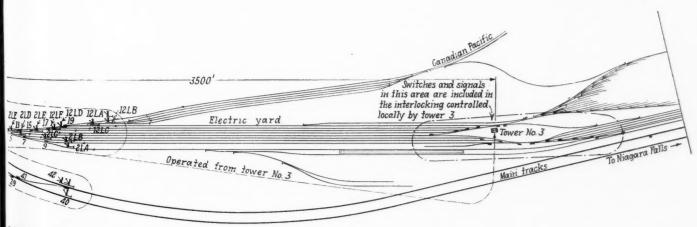
Model-4 Electric Switch Machine After Being Rebuilt.

such as signals 6 and 12, which govern reverse running moves on a route over a crossover to the other main track for right-hand running into automatic block territory beyond the plant. The use of the green aspect on such a signal permits trains to pick up speed and get under way, rather than operating at slow speed for longer distances. The same statement regarding the use of three aspects applies to signal 36, governing movements from the yard to the main line, and also to dwarf signal 22, which governs movements from the westward freight train which also is used frequently by Canadian Pacific passenger trains when making the station stop.

Signal 32, which governs reverse running moves from the normal westward main track into the yard or over the crossover to the eastward main track, has a fixed top "arm" and a three-position lower "arm." Dwarfs displaying only two aspects, red or yellow, are used to govern short routes confined to interlocking limits or up to other interlocking signals, such as leading out of a locomotive parking siding or out of a yard track.

The New Windsor Control Machine

The new NX control machine in the Windsor station has 19 entrance knobs and 19 exit buttons to control 6



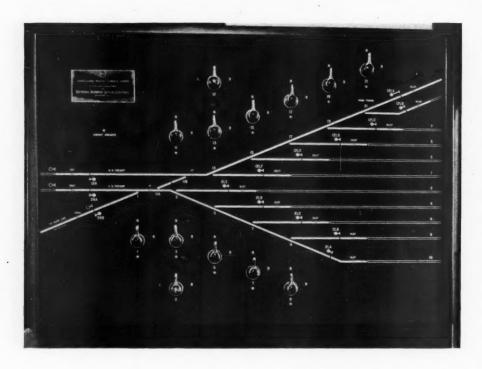
Interlocking Layout at Windsor

single switches, 6 crossovers, 2 tunnel protection derails and 19 signals. The panel of the control machine is 18 in. high and 60 in. long. For the area within home signal limits and the approach sections on the main lines, each track is represented on the diagram by white lines $\frac{3}{16}$ in. wide, which stand out in contrast with the dull black finish of the panel. Small lamps mounted in the lines representing the track are normally extinguished, but are lighted to show white when each corresponding track circuit is occupied by a train, thus outlining the route being used.

The switches and crossovers are represented by small, movable sections of the track which are called route indicators. The movable sections are operated by magnets mounted behind the control panel, and are actuated to positions which outline the route as soon as the

adjacent to each knob. The knob is hollow and surrounds a separately-supported round disk of Lucite, which fits in the face of the knob. A white glass arrow in the face of the knob points in the direction in which the corresponding signal controls, and maintains this position. A small round white marker, on the outer rim of the knob, indicates the position of the knob, this marker normally being in line with the track and at the base of the arrow in the face of the knob.

An exit button is mounted in the line representing the track at each point where a train leaves the section of track over which a signal governs. Each exit button is $\%_6$ in. in diameter, and normally stands out from the panel $\%_6$ in. A white arrow on the face of each exit button points in the direction a train is going when leaving the end of a route controlled by that button.



The Lever Type Interlocking Machine for Controlling the Switches and Signals at the West End of the Electric Yard.

towerman pushes the exit button. An indication whether each switch is locked is given by a small lamp with a red lens, mounted behind the track lines adjacent to each route indicator. Each such lamp is lighted to show red when electric locking, including the equivalent of mechanical locking, has taken effect at the corresponding switch, and the switch is, therefore, not free to move. Thus these lamps are known as "lock lights."

Entrance Knobs and Exit Buttons

In the line representing the track, at the location corresponding to each interlocking signal, there is an entrance knob. As a means of effecting different controls, each knob can be pushed, turned, or pulled, and in each instance a different set of contacts is operated. The knob is so constructed that it cannot be pressed while in a turned position; therefore, only one type of control can be initiated. When pushed, the knob returns to the normal position by spring action, as soon as the towerman removes his finger. When the knob is turned to initiate a control, it must be turned back to normal in order to cancel the initiation. When a knob is pushed to initiate a control, it may be pulled to cancel that initiation.

Each of these knobs is 3/4 in. in diameter, and stands out 1 in. from the face of the panel. To facilitate identification, the number of the signal is etched in white,

These exit buttons are operated by pushing, and do not turn; they return to normal position by spring action as soon as the towerman removes his finger.

In normal operation, when a route is to be lined up, the towerman pushes the entrance knob corresponding with the signal for the track on which the train is to enter the plant. This action causes a red light to flash behind the arrow in the face of the knob, as an indication that the lining up of a route has been initiated.

The next action is to push the exit button corresponding to the end of the route, following which the route indicators immediately line up to correspond with the route desired. The red lock lights under the route indicators are lighted at the same time and indicate, in conjunction with the continuous white line, the route which has been called for. After the various switch machines have responded to the route called for and the signal clears, the flashing light in the entrance knob changes to a steady burning green or red indication. The green indication shows that the signal has cleared. The red indication is used with signals which govern beyond interlocking limits to show that a route has been lined up, but that the signal has not cleared because of track occupancy. When the train ahead moves out of the block, the signal clears and the indication changes from red to green.

If the towerman initiates a movement by pushing or

turning the entrance knob and the route desired is not available, the pushing of the exit button has no effect, and the lamp in the entrance knob continues to flash. In this case the operator may cancel the initiated condition as described above, or may wait for the route desired to be available and again press the exit button. The non-availability of a route is indicated to the operator by following the desired route across the panel and noting whether the red lock light is lighted under any of the route indicators which must be operated in order to secure the desired route. As the train travels over the route, the signals go to Stop and remains at Stop until the towerman again sets up the route (stick signal). This is known as "automatic route restoration."

When lining up a route including several intermediate signals, the push operation of the entrance knob and the exit button at the end of the complete route causes the switches to operate and all of the several intermediate signals, as well as the one at the entrance, to clear. This control feature is known as end-to-end control, and eliminates the necessity of operating entrance knobs and exit buttons for each of the intermediate sections.

When a "closing-in" move is to be made, as, for example, to move a locomotive back onto a train that is standing within the interlocking limits, a "call-on" signal aspect, consisting of red-over-yellow, is used on a twoarm signal; or a single yellow may be displayed on a dwarf signal. In order to prevent the operator from inadvertently allowing such a move, he is required to use a distinctive type of manipulation by which he *rotates* the entrance knob so that the white dot or marker on the knob turns downward through 90 deg. He then presses the exit button as before.

A flashing red indication is displayed in the entrance knob until the route is lined up. When the signal clears, the indication changes to a flashing green. In this case the signal will not go back to stop when the train accepts The flashing green serves to remind the operator that he must rotate the entrance knob back to normal as soon as the train has passed the signal.

Special Control of Derails and Traffic Locking

The two derails, 7 and 9, on the two main tracks are set normally to derail cars so they cannot drift down into When establishing a route including one the tunnels. of these derails, the derail is controlled to clear the track the same as a switch is controlled in the NX system. After a train uses a route and passes beyond the home signal limits, the switches remain as they were until another route is established. However, to return the derails to the derailing position to provide the protection for which they were installed, the controls are so arranged that when the rear of a train clears the track circuit including a derail, that derail automatically returns to the derailing position without any action on the part of the operator.

The two knobs at the left, on the lines representing the tracks through the tunnels, are for the control of traffic-direction locking for the control of signals to direct train movements by signal indication in either direction on each track between the Windsor interlocking and the 15th Street interlocking in Detroit. Normally the traffic-direction locking is set up for right-hand running, but if no train is within the traffic-locking section or approaching it, the direction of traffic may be reversed on either track by co-operative action on the part of the

operators at the two ends of the tunnels.

The 14 signals, 10 single switches and 1 crossover at the west end of the Electric Yard are controlled by a miniature-lever interlocking machine on the operator's desk in Tower 3, which is located about 2,800 ft. east of this track layout. The face of the panel is 18 in. high and 26 in. wide. The main track sections are represented by white lines 1/8 in. wide in the panel. Each section has a translucent round spot which is illuminated when the corresponding track circuit is occupied. Cars are left standing on the yard tracks for extended periods, and, therefore, track-occupancy indications would be of no use. In order that the operator may know when a train is ready to pull out of a yard track, a track circuit 100 ft. long was installed in the approach to each signal governing a move out of a yard track. Occupancy of each of these sections is indicated on the diagram by a small white illuminated spot in the track line.

The crossover and the 10 single switches are each controlled by a two-position lever, these levers being arranged in two diagonal rows, one above and the other below the track diagram so that each lever is adjacent to that portion of the diagram which represents the corresponding switch. Switch 21 leads to a yard track which is used primarily for storing cars, and, therefore, the installation of a power switch machine was not justified. This switch is operated by a hand-throw stand but a lever, No. 21, is provided and must be operated to line up the signal selections for a move over this switch when it is reversed by hand throw. A telephone is provided at this switch so that trainmen can inform the operator when they want to use this switch.

Switch 1 is normally lined for through moves on the straight track of the eastward freight track. The cross-over between the two freight main tracks is normally open. The switches leading from the two ladder tracks to the various yard tracks are normally lined for through moves on the ladder tracks. With this set-up, no yard track switch has to be moved to line up for a Canadian Pacific passenger train when moving over the north

ladder track.

The switch levers stand normally in the vertical position, thus controlling the corresponding switches to their normal position. When a switch is to be operated to permit a train movement into or out of a yard track, the corresponding lever is thrown 90 deg. to the right. A white lamp below each switch lever is illuminated when the lever is thrown and continues to stay lighted until the switch moves to the corresponding position and is locked; then the indication lamp is extinguished. This indication is known as the out-of-correspondence lamp, and, in case the switch does not follow the lever control, the operator thus has this information at once.

A red lamp in the face of each switch lever is illuminated when the switch is electrically locked and not free to be thrown. Since pre-conditioning is prohibited, this light constitutes a "Hands Off" light. If the operator should throw the switch lever when this light is lighted, the switch will not operate, even though electric locking is subsequently released. Both the lock light and the out-of-correspondence light will remain lighted. The operator is obliged to return the switch lever to the last position, and, if the lock light is extinguished, he is then free to throw the switch.

An analysis of this layout showed that only a limited number of routes could possibly be used simultaneously, and, therefore, only two signal levers are required to control a total of 14 signals which direct trains on a total of 54 different routes. Normally each signal lever stands on center with its handle pointing upward, thus controlling the corresponding signals to display the Stop aspect. When a signal lever is thrown 90 deg. to the right, one eastward signal clears, depending on the position of the switches in the route lined up. When the lever is thrown 90 deg. to the left a westward signal is cleared for a route. When a signal lever is thrown

and the corresponding signal clears, a white lamp in the face of the signal lever is lighted. Since the yard signals are not track circuit controlled, the lamp remains lighted until the operator puts the signal to Stop by plac-

ing the signal lever normal.

Having cleared a signal, all of the switches involved are automatically locked. After a train accepts and passes the signal, all the switches involved are automatically locked by the detector locking. Therefore, even though the operator might inadvertently throw a switch lever, no action of the switch would take place. If the operator clears the signal for a train on any approach circuit, and then "takes the signal away" by moving the lever, no switch in the route can be moved and no opposing or conflicting signal can be cleared for 15 sec., which allows time for the train to stop short of the signal or to enter the home signal limits and thereby maintain the locking on the switches and lock out opposing and conflicting signals.

These new interlockings were planned and installed by signal forces of the Michigan Central, under the direction of R. E. Green, assistant signal engineer. L. Rupert, circuit engineer, was assigned to this project to develop the plans and inspect the construction and installation. F. M. Brown, signal supervisor, had general supervision of the construction. The new control machines, signals, relays, rectifiers and replacement parts for the switch machines were furnished by the General Railway Signal

Company.

Cantilever Introduced in This Simple-Truss Bridge

(Continued from page 948)

quired, first, to permit driving the hanger pins for connecting it to the adjoining simple span and, second, to bring the westerly end of the new steel to the desired elevation for its position in the camber diagram of the completed structure. However, all of these operations were completed practically within the allotted time, and adequate supports for the new steel were introduced to cause it to act temporarily as a continuous structure, so that the afternoon passenger train could cross the bridge

with only a slight delay.

After the operations described above had been completed, the 300-ft. span that had been rolled out was placed on longitudinal roll beams and shifted in a westerly direction 721 ft. to a point opposite its new position in the structure, after which it was moved laterally into its final alinement. Meanwhile erection of the remainder of the new steel was taking place in the clear around a gap left in the north truss for the detour track. Subsequently, this gap was closed and traffic was diverted permanently on to the new structure, without interruption to train service. In its new position at the westerly end of the bridge, the relocated simple span is supported at one end on the new pile pier, while the other end is suspended from the westerly projection arm of the new fixed span.

As a part of this project, it was necessary to relocate a number of the railroad's buildings and other facilities, including the bridge controls for the swing span. These were formerly located on land in the bridge gateman's house, but in carrying out the project it was necessary to remove them to the powerhouse on the swing span. It was also necessary to raise the track west of the bridge to meet the level of the bridge extension, this being accomplished in part by building a new timber approach

trestle extending as far as the government's new levee, a distance of 240 ft. from the end of the steel.

C. S. Kirkpatrick, chief engineer, and R. Owen, construction engineer, of the Gulf Coast Lines, had supervision over this project for the railroad. During the progress of the work Lieutenant Colonel Wm. F. Tompkins was district engineer of the Second New Orleans district, Corps of Engineers, U. S. Army. The Missouri Valley Bridge & Iron Company was the general contractor on the project at a contract price of \$723,779, the superstructure work being sub-let to the Mt. Vernon Bridge Company. Paul H. Galbraith was the superintendent on the project for the general contractor; while Otto F. Sorgenfrei served as resident engineer for Modjeski and Masters and the J. F. Coleman Engineering Company, who prepared the plans for, and supervised the execution of, the bridge alterations.

Two Western Trains Christened

WRTHER bids for more passenger traffic in the west have been made by the Chicago, Milwaukee, St. Paul & Pacific which placed its "Midwest Hiawatha" in daily service between Chicago and Omaha, Neb., and Sioux Falls, S. D., on December 11 on a schedule of 480 minutes for the 488 miles, and the Chicago, Rock Island & Pacific-Southern Pacific which placed its "Arizona Limited" in operation between Chicago and Phoenix, Ariz., on December 15 on a schedule of 39% hr. westbound and 38½ hr. eastbound. Besides reducing the time between terminals, these trains offer an improved service and modern equipment.

The Midwest Hiawatha joins a fleet of sister trains which have an enviable record. During the period from June 1, 1935, when the first Hiawatha was placed in service between Chicago and the Twin Cities, to October 31, 1940, all Hiawathas, including the Morning, the Afternoon, the North Woods and extra sections carried 1,895,815 revenue passengers with a total revenue, excluding that from mail, dining and buffet cars, amounting to \$9,295,166. Out-of-pocket expenses, including depreciation, amounted to \$3,629,263, leaving a net revenue of \$5,665,903 for the period. Afternoon and North Woods Hiawathas carried 1,606,701 revenue passengers with a revenue of \$7,510,933 for this period. Out-ofpocket expense, including depreciation, amounted to \$2,745,020 leaving a net of \$4,765,913 for the period. Morning Hiawathas began operation on January 21, 1939, and up to October 31, 1940, carried 289,114 revenue passengers with a total revenue of \$1,784,233, expenses of \$884,243 and a net of \$899,990.

The service performed by the Midwest Hiawatha is not confined to the line between Chicago and Omaha and Sioux Falls, but extends to Rockford, Ill., Dubuque, Iowa, Cedar Rapids, Des Moines and Rapid City, S. D. Westbound this Hiawatha leaves Chicago at 12:45 p. m. and splits at Manilla, one section going to Omaha where it arrives at 8:45 p. m. and the other to Sioux Falls, where it arrives at 11:55 p. m. On the return trip, these two sections, leaving at 12:35 p. m. and 9:10 a. m. respectively, unite at Manilla and arrive in Chicago at 8:35 p. m. At Davis Junction the west and eastbound Hiawatha is met by a bus which carries passengers to and from Rockford on a 35-min. schedule. On the west-bound trip, a steam train carries passengers from Dubuque to Savanna and on the eastbound trip from

(Continued on page 958)

Regulators Ready for Defense

State commissioners also reaffirm opposition to federal encroachment; but some of their committees call for elimination of "trade barrier" state motor laws

on the national defense program, members of the National Association of Railroad and Utilities Commissioners, meeting at Miami, Fla., last week, nevertheless reaffirmed their traditional opposition to any attempts by the federal government or its agencies to encroach upon the "sovereign powers and prerogatives of the several states." The three-day meeting, held December 10 to 12 in the Miami-Biltmore hotel, was the Association's fifty-second annual convention; it was attended by 425 members and guests representing 41 states, the District of Columbia, Puerto Rico and four federal commissions, i.e., the Interstate Commerce Commission, Federal Communications Commission, Federal Power Commission and Securities and Exchange Commission.

The I. C. C. was represented by Commissioners Claude R. Porter and William E. Lee, the latter being on the program as a discussion leader. At the election held during the convention's closing session, James W. Wolfe, member of the Public Service Commission of South Carolina, was advanced from the first vice-presidency to the presidency, succeeding Harry Bacharach, president of the New Jersey Board of Public Utility Commissioners. Likewise, R. C. Wakefield, member of the Railroad Commission of California, moved forward from the second vice-presidency to succeed Mr. Wolfe in the first vice-presidency; and J. D. James, chairman of the Missouri Public Service Commission, was elected second vice-president. Also, General Solicitor John E. Benton and Secretary Ben Smart were reelected. St. Paul, Minn., was selected as the 1941 convention city, the executive committee to set the date which is expected to be in late August or early September.

Meanwhile, retiring President Bacharach had presided over the convention's sessions, which included a day devoted to discussions and reports on transportation matters. Much of this related to motor transportation, although there was considerable about railroads here and there in the discussions and more particularly in the committee reports. Among the latter was the comprehensive report of the committee on progress in public utility regulation which took the form of a 156-page treatise entitled "Utility Regulation and National Defense." In it was a section on "Land Transportation and National Defense," including a discussion of the "Adequacy of Railroad Facilities."

Calls for Elimination of "Trade Barriers"

s a c, o. i. e s, se e-at

d

to

u-

The committee reports also turned up a couple of calls for the elimination of alleged motor vehicle size and weight "trade barriers," and for the extension of motor vehicle "reciprocity" among the states. But one "trade barrier" touch was eliminated, when a recommendation that the Association go on record in favor of uniform size and weight regulations was deleted from the report of the committee on safety of operation of transportation agencies. The preprint of that report had

included such a recommendation with something of an apology to the effect that the matter "is not strictly a safety one," but "is closely allied with safety." In presenting the report, Chairman C. L. Doherty (vice-chairman of the South Dakota Public Utilities Commission) stated that the committee had later decided "after careful consideration" that it would not be well to

incorporate such a recommendation.

A sidelight of the convention was an evening meeting at Fort Lauderdale, attended by representatives of Southern, Southwestern and Western states. Called by Chairman W. R. McDonald of the Georgia Public Service Commission at the suggestion of Governor Rivers of that state, the meeting was designed to consider the three sections' mutuality of interest in the Interstate Commerce Commission's Nos. 28300 and 28310. general investigations of the class rate structure and the consolidated classification. Records in these proceedings, it seems, will include some presentations on alleged discriminations in interterritorial freight rates. Speaking to the evening assembage at Fort Lauderdale, Governor Rivers noted that the three sections represented had decided to make separate presentations in Nos. 28300 and 28310; but he nevertheless thought that there was room for cooperative action up to a certain point-for example, on opposition to abandonment of the investigations. He therefore pleaded for coordinated activities insofar as each group may not think it against its interest to co-operate. A steering committee for that purpose has been named.

Rivers Wants South's Rate Fight to Go On

Governor Rivers called attention to the fact that he will retire from office in January, and he introduced Governor Cooper of Tennessee who will succeed him as chairman of the Southern Governors' Conference. Meanwhile the Georgian will continue to feel strongly about pushing the South's freight-rate fight "to a successful conclusion." At another point in his talk, Governor Rivers called it a fight to get a rate adjustment "for the benefit of the country as a whole." What the South is trying to do, he added, is to eliminate sectionalism; to prevent the nation from continuing "to be Balkanized by these differentials." At the suggestion of Governor Cooper, the meeting passed a resolution petitioning the I. C. C. for an early decision as to procedure in Nos. 28300 and 28310—to the end that those proceedings might be expedited.

Meanwhile, at the convention's opening session in the main tent the delegates had heard welcoming speeches from three Florida mayors and from Chairman E. S. Mathews of the Florida Railroad Commission. Then the meeting got down to business with the address of President Bacharach. The latter opened with advice to his fellow commissioners to consider the problems before them with a disregard of "legalistic technicalities." "Reach a 'common sense' conclusion," he said, "and put the 'burden of proof' upon your associates of the law to prove 'beyond a reasonable doubt' that constitutional or

statutory barriers stand in the way of giving your conclusions effect." Previously, Mr. Bacharach had paid his respects to lawyers, although he did not want it thought that he was in agreement with the one who called for the killing of all lawyers as "the initial step in progressive reform." "Far from it," said the New

Jersey commissioner, "but aye, not too far."

Coming to his review of the past year, Mr. Bacharach said that it had been "comparatively quiet" insofar as the Association was concerned. Since enactment of the Transportation Act of 1940, there has been no pending legislation which would affect the state regulatory powers, he added. Moreover, he went on, "none now seems imminent"; but "in these days of sudden changes, when there is a strong drift towards centralization of power and control, it may be rash to say that state regulation is safe from legislative attack." Continuing, Mr. Bacharach elaborated upon this federal-encroachment theme, saying in one place that "Absentee landlordship has everywhere proven disregardful of local interests and ill in consequences. I cannot escape the conclusion that absentee governmental regulation of matters primarily local and only incidentally, insubstantially and remotely affecting interstate interests, will for like reasons, have like results." At the same time the president recognized the prevailing cooperation between state and federal commissions; and he called the fostering of such cooperation "perhaps the greatest single contribution of the Association toward solving the regulatory problems of this country."

Bacharach Urges Teamwork on Defense

Concluding, Mr. Bacharach called attention to the national-defense discussions in the committee reports. "The state commissions," he said, "have an important part to play in any program of national defense. What maximum results demand is teamwork between national and state commissions. The state commissions though insisting that the fundamental distribution of power between the states and nation stand intact and be not blurred or blotted out under any guise, stand ready to take their places upon the line and answer the signals of the Commander-in-Chief and throw their full weight

into united effort."

Similar sentiments were expressed in the report of the national defense program committee, which was presented by Chairman F. W. Matson (member of the Minnesota Railroad and Warehouse Commission) at December 10's afternoon session. Much of that session was devoted to a discussion of "The State Commissions and National Defense," discussion leaders being John S. Boyer, member of the Missouri Public Service Commission; James L. Fly, chairman of the Federal Communications Commission; and Ormond R. Bean, public utilities commissioner of Oregon. Mr. Boyer said that transportation and other utility problems which have thus far arisen in connection with the defense program "are merely preliminary indications" of those to come. In his opinion, the transportation companies and utilities have been "reasonably alert" in anticipating the government's needs; but he complained that uniform cooperation has not prevailed "particularly on the part of organized labor." Strikes in defense industries, Mr. Boyer asserted, "are inimical to the defense program, and in effect disloyal-if not worse."

Chairman Fly of the F. C. C. did not quite go along with that. He suggested that "in the struggle to save democracy we must not toss away social gains." He added that "the fundamental rights of labor are entitled to every consideration in time of peril"; but that "does not mean a right to impair national defense." Likewise, Mr. Fly went on, "private property rights should not be heedlessly seized or impaired." The F. C. C. chairman proceeded to discuss, among other defense developments, the recently-organized Defense Communications The Association of American Railroads' Telegraph and Telephone Section is represented on that Board's advisory committees. Oregon Commissioner Bean's talk was a progress report on what has been done in that state with respect to an emergency and defense organization of transportation, communication and power facilities.

Report on Adequacy of Rail Facilities

Next, after a brief talk by Chairman Leland Olds of the F. P. C., the delegates received the aforementioned comprehensive report of the committee on progress in public utility regulation. The committee's chairman— Leon Jourolmon, Jr., member of the Railroad & Public Utilities Commission of Tennessee-described the pamphlet as "something in the nature of a handbook of information." The 8½-page section on the "Adequacy of Railroad Facilities" was prepared for the committee by W. Trigg Miller, economic analyst for the Tennessee commission. After noting how various agencies of transportation have developed in recent years, Mr. Miller suggested that the defense program will mean increasing traffic loads. "Accordingly," he went on, "a question of considerable concern to many people throughout the country is whether or not the railroads will be capable of handling the increased load due to our present and prospective national defense program as well as demands from abroad." He proceeded to point out how lessons learned in the last war will prevent the use of cars for storage, and examined the A. A. R.'s present hold-order and embargo systems as devices for preventing congestion. Although Mr. Miller called the embargo system "rather complete," he thought it would be necessary "in any acute emergency for the federal and state regulatory commissions to render aid in the solution of rail traffic problems."

Then, after citing official railroad pronouncements to the effect that the carriers "are fully capable of taking care of any immediately predictable contingencies," the report found that "these same sources have occasionally made admissions and released data which may be interpreted as challenging some of their assertions." While he saw little prospect of a general car shortage, Mr. Miller was concerned about "bottlenecks for specific types of cars"; and he predicted that "local and regional car shortages and urgent needs for specific types of cars on particular railroads will undoubtedly grow more numerous in the future."

Moreover, the report added, "the age and condition of freight cars and locomotives furnish other reasons for justifiable national concern as to the ability of the railroads to meet fully the requirements of the national defense program." Here followed a tabulation of freight cars by ages, leading up to this: "Many of these cars are so old and in such bad condition that they are bound to be making frequent trips to the repair track. Such cars are obsolete, inefficient and unduly expensive to operate. In heavy usage under emergency conditions, considerable numbers of them would develop operating failures at critical times."

Sees Reduced Capacity in Equipment Industry

"Summarizing the national defense position of the railroads today as compared with 1917," Mr. Miller concluded, "it must be remembered that railroad transportation facilities have decreased since the last war. However, technical advances have increased the service capacity of modern equipment, and the average size of freight cars and locomotives has increased in the interval. Hence the reduction in capacity is not quite as great as indicated by the decrease in the number of units. . . . defense emergency load which the railroads will be called upon to handle is not predictable with any degree of accuracy, but every indication points to a greatly increased traffic load. It is true that between the high and low points of a normal traffic year there is a wide variation in carloadings. However, if a big emergency demand should occur simultaneously with a normal peak, a great strain would be placed on railroad facilities. To accentuate the gravity of such a contingency, if it should happen in the near future, it is probable that the railroads would not be able to increase their transportation capacity very rapidly because of the reduction in the capacity of railroad equipment suppliers which occurred during the recent depression."

The foregoing was followed in the report by sections on "The Motor Carrier Industry and National Defense' and "Development and Use of Inland Waterways." The former, written by Cordell Louthan, motor carrier rate director of the Tennessee commission, closed with an observation to the effect that "motor transportation is already playing an important part in the national defense program as thousands upon thousands of these commercial carriers, loaded with national defense commodities, are traversing the country daily." Previously Mr. Loutham had found that the American Trucking Association "is actively engaged in promoting motor transportation in the interest of national defense"; and that "the individual truckman and trucking company have

cooperated with the defense program.' Continuing, this treatise made some of the aforementioned references to "trade barriers." "A matter of vital concern to the trucking industry, and one which has so far done much to retard its progress," it said, "is the number of state laws and restrictions which present defi-nite barriers to interstate commerce." Then after quoting from utterances of Paul T. Truitt, chairman of the Department of Commerce's interdepartmental committee on interstate trade barriers, Mr. Louthan made this prediction: "These artificial barriers would be eliminated in wartime and only terrestrial obstacles would restrict

highway transport. . . ."

1

0

g

e

y --

le

ic

al

rs

re

of

or

il-

al

ht

re

to

rs

te.

ble

at

the

ta-

)W-

Praise for Waterway Advocates

In the preparation of its section on inland waterways, the committee "relied to a considerable extent on the technical advice" of A. D. Spottswood, chief of the Tennessee Valley Authority's Transportation and Industrial Economics Division. After lauding the Mississippi Valley Association, T. V. A. and others for their successful advocacy of "needed improvements for different rivers," the report has this to say: "The waterways are now equipped to handle much greater traffic loads than they were in 1917, and therefore they will be a contributing factor in reducing the probability of overloading the somewhat reduced railroad capacity. Their part in the defense program is important not only for this reason, but also because the actual carrying capacity of the rivers can be increased very rapidly by an increase in floating equipment." The committee also thought it significant "that the Germans have directed that waterway transport be used to the limit of its capacity in order to free the railroads for military operations."

December 11's morning session was devoted to a discussion of "Co-ordination of Federal and State Regula-tion of Motor Carriers," and there came the talk by Interstate Commerce Commissioner Lee, who addressed

himself to one of the general subject's sub-topics, i. e., provisions of the Transportation Act of 1940 which affect cooperation between state commissions and the I. C. C. First of the discussion leaders to speak on that sub-topic, however, was Moie Cook, member of the Indiana Public Service Commission. Mr. Cook called attention to the Motor Carrier Act's new section 204 (a) (4a) and section 205 (b), the former of which, under certain conditions, exempts from federal regulation the interstate operations of motor carriers engaged in operation solely within a single state. The section 205 (b) amendment provides that the failure of a member of a joint board to participate in any hearing, on a matter referred to such board, shall constitute a waiver of action on the part of the state from which the joint board member was appointed. The section 204 (a) (4a) change, Mr. Cook thought, was a step in the direction of cooperation between state and federal agencies; but the section 205 (b) change was a step away. Becoming specific on this cooperation matter, Mr. Cook thought there were possibilities in the field of enforcement and in a plan whereby the I. C. C. would consult interested state authorities before authorizing highway operations over a specific route.

Lee Serves Delegates a "Puzzle Sandwich"

Commissioner Lee's talk was in the main a propounding of a series of questions and suggested intepretations of the aforementioned section 204 (a) (4a). It looked pretty complex as he set it up; but he did recognize that "in the enactment of this new provision, Congress meant to authorize the Interstate Commerce Commission to exempt a certain class of motor carriers from federal regulation." He added an expression of hope that "we He added an expression of hope that "we may so interpret the law as to carry out the intent of Congress." Later, General Solicitor Benton of the Association, said that Commissioner Lee's talk seemed like a "puzzle sandwich," beginning and ending with "helpful comment," between which was the puzzling matter that "must have been presented to the judge by some ingeni-ous gentleman." Continuing, Mr. Benton suggested that Mr. Lee read President Bacharach's address which advises "the application of a little common sense." Then, Mr. Benton thought Judge Lee would decide that only those motor carriers with an insignificant amount of interstate traffic should be exempt from federal regulation; and only those with enough interstate traffic to make them important should be left under I. C. C. juris-

Along the same line was the comment of Chairman H. L. Hooker of the Virginia State Corporation Commission. Mr. Hooker said that one would think from Mr. Lee's talk that "it would take a magician to unravel this amendment." "Surely," Mr. Hooker added, "Congress did not pass anything as foolish as Judge Lee would have us believe it is. We have been told since 1935 that the I. C. C. wants to cooperate. This amendment will give you (i. e., the I. C. C.) that opportunity. You are 'on the spot' on that proposition; and we'll know by the next convention what the assurances of cooperation have meant."

The next sub-topic was "'Reciprocity' Agreements between States Relating to Motor Carriers Operating in More than One State;" its discussion leader was Chairman McConnaughey of the Public Utilities Commission of Ohio. The lack of widespread "reciprocity," in Mr. McConnaughey's opinion, has tended in the past to create "a very real barrier to the extension of interstate motor vehicle operation." He added that it was not uncommon for the annual taxes "to exceed the value of the vehicle taxed;" and that "railroad lobbies not unnaturally encouraged legislatures to levy such taxes and actively

campaigned for trucks and buses to 'pay their way.'" Continuing, Mr. McConnaughey outlined recent attempts to develop satisfactory "reciprocity" agreements, and called upon his fellow commissioners to obtain the necessary statutory authority to execute such agreements. In closing he gave the delegates the benefit of his view that "the national defense requirements demand that all trade barriers be removed as between the states and 'reciprocity' is one very important step which should be taken toward the elimination of such barriers." Later on Mr. McConnaughey embodied similar views into the report of the committee on progress in the regulation of transportation agencies of which he was chairman. That committee spent most of its time on motor transportation matters—"due to the fact that the field of railroad transportation has, to a considerable extent, been preempted by the federal regulatory bodies.

Committee Reports

Among other committee reports was that of the committee on legislation which found in the Transportation Act of 1940 new provisions to protect state powers in the administration of state laws, and to promote the cooperation of state commissions with the I. C. C. committee was headed by Commissioner Hooker of Virginia. The special committee on rates of transportation agencies, headed by Commissioner B. C. Larkin of the Public Service Commission of North Dakota, urged all commissions of states included within the scope of the I. C. C.'s 28300 and 28310 investigations to take an active part in presenting evidence in those proceedings. Those cases, the committee said, "represent the most ambitious effort of any regulatory body up to this time." Discussing this report, R. J. Beamish, member of the Pennsylvania Public Utility Commission, told how Pennsylvania after long study is about ready "to bind rail and truck rates together." The new system is to be put in for a trial period of 18 months, and Mr. Beamish invited his fellow commissioners from other states to observe the results.

The special committee on uniform motor freight and rail classification was headed by James A. Little, rate expert for the Nebraska State Railway Commission; in Mr. Little's absence it was presented by M. W. Smith of West Virginia. At one point in the report the committee summarized its view as being one holding that "uniform freight classification is both an attainable, worthwhile objective and a challenge to the combined skill of state and federal regulatory bodies." In an appendix to the committee's report was a memorandum by Chairman Little, entitled "History of the Demand for Uniform Classification of Freight."

The committee on service and facilities of transportation agencies had quite a bit to say about destructive competition in the transportation industry; also it cited a few instances of what it regarded as competitive wastes within the railroad industry. It recommended that "thorough and complete studies be made by regulatory bodies of the service rendered by existing transportation agencies and of their possibilities, in order that determinations may be made intended to guarantee to the public the lasting benefits requisite to the national defense and to assure the development and the expansion of trade and industry." This committee was headed by Ward C. Holbrook, president of the Public Service Commission of Utah.

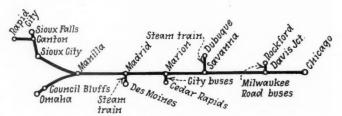
All of those mentioned in the foregoing as well as reports of other committees were received and ordered printed. Such is the only action the convention takes on committee reports.

Two Western Trains Christened

(Continued from page 954)

Savanna to Dubuque in 1½ hr. At Marion, connection is made with city buses for and from Cedar Rapids and at Madrid, connection is also made with a steam train which operates from and to Des Moines in 50 min. At Canton, S. D., the east and westbound trains connect with the east and westbound Sioux operating to and from Rapid City. With this arrangement, the elapsed time from Rapid City to Chicago is 23½ hr. and from Chicago to Rapid City, 28⅓ hr.

The Arizona Limited leaves Chicago at 8:45 p. m. every other day and arrives at Phoenix at 11:25 a. m. the third day. Returning it leaves Phoenix every other day at 6 p. m. and arrives in Chicago at 9:30 a. m. It is an all-room train carrying a deluxe diner, two 5-double-bedroom-10-roomette cars and two two-drawing-room-four-double bedroom-four compartment cars, and a buffet-lounge-observation car with a drawing room, two



Auxiliary Transportation Extends Midwest Hiawatha Service to Many Cities

double bedrooms and two compartments. This latter car, "American Mile Master," was exhibited by the Pullman Company at the New York Fair. The Rock Island hauls this train with a 2,000 hp. Diesel-electric locomotive between Chicago and Tucumcari, N. M., and the S. P. uses a steam locomotive between the latter point and Phoenix.

The departure of the Midwest Hiawatha on December 11 was signaled by a luncheon in its diner at which H. A. Scandrett, trustee of the Milwaukee, was host to representatives of the press. Scenes reminiscent of the days when the arrival of the first train in a community was occasion for celebration were enacted along the Chicago, Milwaukee, St. Paul & Pacific between Chicago and Omaha, Neb. At Savanna, Ill., a band welcomed the speedliner, and the schools closed to permit pupils to view the arrival of the new train. Marion, on the outskirts of Cedar Rapids, where the eastbound and westbound units arrive a few minutes apart, declared a holiday. The high school band and the townspeople turned out en masse and there were speeches on the station platform by the mayor and railroad officers. At Manilla, there was band music and the ladies of the town distributed flowers to passengers on board. Prior to departure in Omaha at noon, a girl dressed as an Indian princess christened the train. At Sioux Falls the chamber of commerce and "Miss Hiawatha" greeted the train.

The Arizona Limited was christened at Chicago with

The Arizona Limited was christened at Chicago with sand from Arizona by Gov. Robert Jones of Arizona in the company of Mrs. Jones and "sun maids" representing the chambers of commerce of Phoenix and Tucson. Also participating in the ceremony were Edward J. Kelly, mayor of Chicago, Oscar G. Mayer, president of the Chicago Commerce Association, and J. E. Gorman and Joseph B. Fleming, trustees of the Rock Island, W. W. Hale, general traffic manager and O. P. Bartlett, passenger traffic manager of the Southern Pacific, and D. A. Crawford, president of Pullman, Inc.

NEWS

K. C. Produce Case in Supreme Court

Ruling on Northern Pacific land grants also among several cases affecting r.r.'s

Several decisions of importance to the railroad industry were handed down by the United States Supreme Court on December 16. In one case the difficult and complex questions of land grants on the Northern Pacific was decided in part and remanded for further litigation in the lower courts; in another the court decided that commission merchants and the City of Kansas City, Mo., had no standing in court to seek an injunction to prevent the Union Pacific from extending its lines to serve a proposed \$4,000,000 produce terminal in Kansas City, Kans.; while in a third case the court decided to review the subject of "Jim Crow" cars in the southern states.

In the case of the Northern Pacific vs. the United States it may be said that the railroad company lost the case, although the court ordered it remanded to the United States District Court for the Eastern District of Washington for a redetermination, which will, in all probability, amount to a new trial.

At one point in the decision by Justice Roberts the majority said that "It may be that the government's evidence will prove fraud on the part of the company of such a character and extent as would disentitle the latter to any award even though the fraud does not extend to an acreage equal in extent to that of the selection rights taken back by the act of 1929.'

In the case the government was seeking to have declared invalid certain land grant patents in Wisconsin, Minnesota, Montana, Wyoming, Idaho, and Washington, which had accrued to the road because of the completion of its construction. A special master and the lower court had held that the road was entitled to the patents, although they disallowed certain claims. It had been further held by the master and the lower court that if the patents were withdrawn, the railroad should be entitled to compensation.

Discussing the subject of indemnity, Justice Roberts wrote that "we think it clear that Congress did not intend to confer a right to indemnity upon the company which would give it lands double in quality at the point of intersection of two of its

The present land grant litigation had its origin some quarter of a century ago when the Northern Pacific sued the government

A. A. R. Puts Up Annual Meeting Speeches in Brochure

As a means of "extending the circulation and usefulness" of the remarkable group of addresses delivered at its unusual and significant two-day meeting in New York on November 13 and 14, the Association of American Railroads has reproduced them in an attractive 88-page brochure "as befits such timely and important messages." The 13 addresses, which were heard by 700 railroad officers and their guests at the first open meeting of the Association, together touch on almost every phase of the railroad business and outside factors which affect it. With each address is printed a terse biographical comment on the speak-These talks were reviewed briefly in the Railway Age of November 16, page 767, and a number of them have been abstracted in subsequent

for compensation for withdrawals by the government of land granted to the railroad during the period of its construction in the latter part of the last century.

During reargument before the court, details of which were given in the Railway Age of October 19, page 567, it was brought out clearly by counsel for both sides that the real bone of contention was the validity of the withdrawals. The government contended that the railroad had forfeited its rights to indemnity by breaching the original contracts, while the railroad held that it should be recompensed either in land or monetary damages for the rights which had accrued to it because of the land grants.

In the case of L. Singer & Sons et al. vs. the Union Pacific Railroad Company, the court, in an opinion by Justice Mc-Reynolds, sustained a lower court decision which had refused to allow a group of Kansas City, Mo., produce merchants to sue for an injunction to prevent the Union Pacific from building an extension to serve a proposed \$4,000,000 produce market in Kansas City, Kans. In a companion decision the court also denied the City of Kansas City, Mo., the right to intervene in the proceedings.

"We cannot think," wrote Justice Mc-Reynolds, "Congress supposed that the development and maintenance of an adequate railroad system would be aided by permitting any person engaged in business within or adjacent to a public market to de-(Continued on page 966)

The Case of the Drunken Hoghead

B. of L. F. & E. says fair trial and not Rule G was issue -Railroad replies

To the complaint of the Pennsylvania that an Adjustment Board referee had ordered it to reinstate, with compensation for time lost, a locomotive engineman, discharged for a Rule G violation, the B. of L. F. & E. replied that the man was given his job back-not because the referee condoned drunkenness, but because of the alleged failure of the carrier to accord the accused a fair trial. The railroad has replied to the B. of L. F. & E. statement, explaining that the referee did not remand the case for another trial, but ordered the restoration to service of an employee whose drunkenness on duty was established.

The B. of L. F. & E.'s statement read in part: "The railroad's statement came on the same day that the United States Supreme Court reversed the conviction of a Texas Negro to life imprisonment for attacking a white woman, on the ground that Negroes are barred from juries in Texas. Would anybody in his right mind therefore contend that the United States Supreme Court condones such an attack? But, identically that position is taken in the present case by the Pennsylvania Railroad when it contends the Adjustment Board's decision condones drunken driv-

Answering this point the Pennsylvania's rejoinder declares: "The Brotherhood's attempt thus to take shelter behind the United States Supreme Court's decision in this case of attack misses entirely the point of the railroad's criticism of the Adjustment Board's decision. In fact, the Supreme Court's decision illustrates and adds force to the railroad's position with respect to the drunken driver case.

When a Court of Appeals, like the United States Supreme Court, reverses a criminal sentence for some defect in the proceedings of a lower court, as in the case of attack referred to by the Brotherhood, all that it does is to wipe clean so that these proceedings can start over again and be conducted in a proper manner, unless this is prevented by some other obstacle than the decision of the Court of Appeals. . . . The very ground of the railroad's objection to the decision of the Adjustment Board is that it did more than this. The Board held that the hearing accorded the drunken engineer was technically defective. Then, however, instead of following the practice of the courts and

sending the case back for a new hearing, conducted in such a manner as to avoid the alleged defects, it went beyond this and said that the railroad must put the man back to work with an award of back The Adjustment Board has already held in other cases involving drunkenness that where it makes such an order to put a man back to work, the whole incident must be treated as closed and the railroad is not permitted to hold a new hearing. Surely, to hold in this way that the occurrence of a technical procedural defect closes the incident and makes it impossible for the railroad to do anything further about the engineman's drunkenness is to encourage drunken driving."

Further, in its statement to the newspapers the Brotherhood said: "The engineer, declaring he had not received a fair trial, appealed to the National Railroad Adjustment Board, a government-appointed agency consisting of five management and five brotherhood representatives, which deadlocked. The case was turned over to a government-appointed referee, who, without ruling on the merits of the discharge, and without consideration of whether the engineer had been drunk, sustained the appeal on the ground that the accused had not been given a fair trial."

Says the P. R. R. to this: "The inference here is that the engineman was not satisfied with the form of procedure in the hearings held by the railroad in his case and appealed to the Adjustment Board against alleged unfairness in his trial. This is not true. The question of unfair trial procedure was not raised in the case submitted to the Adjustment Board by the en.p!oyee and the brotherhood representing him; in fact, the employee in a signed statement said that the railroad's investigation had been conducted in a fair and impartial manner.

"It was the Adjustment Board which first introduced the technical question of procedure in its decision ordering the man back to work. In this decision the Board not only ignored the conclusive evidence presented by the railroad as to the engineman's drunken condition, but also the only issue raised by the Brotherhood and the engineman, that is whether the employee was drunk when he reported for duty and whether he had violated Rule G against the

use of intoxicants.

"As the brotherhood admits in its statement quoted above, the Board did not even give consideration to this central issue but made its decision without consideration of the engineman's conduct. This is what the railroad complains of. When the brotherhood says in its statement to the newspapers that drunken driving had nothing to do with the decision about which the railroad complains, it is correctly stating the attitude of the Adjustment Board in the case, an attitude which the railroad insists, in the light of all facts and evidence submitted, is unfair, unprecedented in judicial or semi-judicial procedure, and which constitutes a continuing threat to the safety and well-being of passengers and employees on American railroads."

I. C. C. Dismisses Barge Line Case

Acting on the company's own request, Division 4 of the Interstate Commerce

Commission has discontinued its Ex Parte No. 133 proceeding in which the Pittsburgh Barge Line, Inc., had applied for authority to operate as a common carrier by water with through routes and joint rates with rail carriers under provisions of the Inland Waterways Corporation Act. details of which were given in the Railway Age of April 13, 1940, page 681. The commission's announcement states that the discontinuance is without prejudice to any rights which the company may have under the Transportation Act of 1940.

Status of R. F. C. Rail Loans

The monthly statement of the Reconstruction Finance Corporation as of November 30 shows loans to railroads (including receivers) of \$783,201,022 and repayments of \$310,482,440.

Engineer-Editor Joins Ickes' Staff

Frederick E. Schmitt, formerly editor of Engineering News-Record, has joined the staff of Interior Secretary Harold Ickes "as a full-time staff consultant of the Bureau of Reclamation" (so reads the departmental statement). Mr. Schmitt is to have his headquarters at the Washington office, the Denver office "and perhaps other field offices, to make special studies and to review plans for project developments. The work will be in both the engineering and economic fields."

Chicago Traffic Club Holds "Good Fellow" Luncheon

Fourteen hundred men and women attended the fifth annual "Good Fellow" luncheon held by the Traffic Club of Chicago on December 13. The program included an address by R. R. McCormick, editor and publisher of the Chicago Tribune, and two and one-half hours of entertainment in which were featured Edgar A. Guest, Lillian Gish, Percy Waram, Margit Bokor, opera singer, Joe E. Lewis and entertainers from the stage and radio. Proceeds of the luncheon were used to purchase 450 baskets of food for needy

Dunn to Address Central R. R. Club Dinner

Samuel O. Dunn, chairman of the board of Simmons-Boardman Publishing Corporation and editor of Railway Age, will be the speaker at the 52nd annual dinner of the Central Railway Club of Buffalo, N. Y., to be held at the Statler hotel, Buffalo, on Thursday, January 9. A special train carrying the New York, Philadelphia (Pa.) and Harrisburg delegations will leave Pennsylvania station, New York, on January 8 at 6 p. m. G. LeBoutillier, vice-president, New York zone, Pennsylvania, is chairman of the committee in charge of arrangements.

New Delay on Protective Service Revenue Account

The Interstate Commerce Commission, Division 1, has further postponed from January 1, 1941, until January 1, 1942, the effective date of its outstanding order prescribing for steam railroads operating-revenue account 117 "Protective Service-Perishable Freight." The original order

was dated July 13, 1937 and effective July 1, 1937.

A like postponement has also been made of the effective date of a similar order prescribing for electric railways operating-revenue account 108½, "Protective Service Revenue-Perishable Freight."

New 125-Mile Railway Opened in North China

The North China Railway Company, a Japanese-operated road in conquered China, and Japanese military authorities joined in ceremonies on November 15 to dedicate a new 125-mile loop-line railroad between Tehchow (on the Tientsin-Pukow line) and Shihchiachwang (on the Peiping-Hankow route), according to the American commercial attache at Shanghai. The original plan of the Chinese National Government prior to opening of hostilities with Japan in 1937 was to connect these two main line railroads on somewhat a different route from Tsangchow to Shihchiach-

Friday the Thirteenth Hits Pennsy's N. Y. Zone

Friday, December 13, lived up to its reputation and dealt the Pennsylvania's New York Zone a couple of blows below the belt in the short space of five minutes. At 6:25 p. m. a broken catenary wire made it necessary to turn off power on all tracks of the busy line between Newark, N. J., and Pennsylvania station, New York, and eastbound trains were tied up until 7:30 p. m. and westbound trains until 8:15 p. m. Five minutes after the break-at 6:30 p. m.-a fire of undetermined cause was discovered in the old erecting shop at Meadows shop (between Jersey City and Newark). The shop-which is being used for storage-was considerably damaged.

President Vetoes Bill to Curb Administrative Agencies

Congress this week received President Roosevelt's expected veto of the recentlyenacted Logan-Walter bill, H. R. 6324, which would have provided for uniformity in the administrative procedures of certain federal agencies and judicial review of the rules and decisions of such agencies. Agencies of particular interest to the railroad industry would have been exempt.

The Interstate Commerce Commission was out when the bill came from the House committee on judiciary; the Railroad Retirement Board, National Media-tion Board and National Railroad Adjustment Board were taken out on the floor of the House under an amendment offered by Representative Crosser, Democrat of Ohio.

Status of Fred Harvey, Inc., **News Agents**

Examiner William A. Disque has recommended in a proposed report that the Interstate Commerce Commission interpret its orders defining and classifying employees to bring under the provisions of the Railway Labor Act those Fred Harvey Service, Incorporated, employees who act as news agents on trains of the Atchison, Topeka & Santa Fe.

Noting that the commission's Division 3

has held that the Harvey dining-car employees are covered by the Labor Act, Mr. Disque follows through to a finding that "the facts and circumstances of employment and supervision, the contractual relationships and the positions of the parties involved are the same with respect to these news agents."

Suggests "Supertransportation System"

A statement in support of a proposal "to complete the construction of a double-track railroad and build a superhighway through the Blue Ridge Mountains from Walhalla, S. C., to Maryville, Tenn., as a national defense project" was recently inserted in the Congressional Record by Representative Hare, Democrat of South Carolina. Mr. Hare said that the same observations had been filed with President Roosevelt a

few weeks ago.

"The idea is not new," the statement said. "Military experts and national leaders as far back as 1828 felt there was a military necessity for a better transportation system leading from the granaries of the Midwest to the Southeastern seaboard." The statement's heading calls the project a "Supertransportation System."

Correction—Revenues & Expenses Tabulation

In the table of Revenues and Expenses of Class I Railways for the month of October, 1940, published in the December 7 issue of Railway Age (page 892), figures for the New Orleans & Northeastern and the Georgia, Southern & Florida were inadvertently transposed. A correct reading, therefore, for the N. O. & N. E. will be the figures printed horizontally opposite the G. S. & F. listing; while the correct G. S. & F. figures will be found horizontally after the N. O. & N. E. listing.

Lackawanna Offers Week-End Ski-Camera Trip for \$7.50

A ski-camera "safari" which gives patrons two nights away from home and 11/2 days of skiing, skating, photographing and barn-dancing will be operated by the Dela-ware, Lackawanna & Western on January 17. Charging \$7.50 for a round trip of 234 mi. in each direction, the railroad will operate a special train of air-conditioned coaches, dining car, and tavern-recreation car from New York on Friday (January 17) at 6:15 p. m., arriving at Norwich, N. Y., at about midnight. The special will Y., at about midnight. The special will return Sunday (January 19), leaving Norwich at 12:50 noon and arriving in New York at 7:25 p. m. The railroad is making reservations in advance for a limited number of persons in each car (which will be designated "smokers" and "non-smok-') and will limit the number of patrons to those who can be accommodated by hotels and private homes at Norwich.

d

ie

et

es

1-

VS

3

P. R. R. Flies Dividends to British Owners

To make certain that its stockholders in Great Britain received, simultaneously with those in America and elsewhere, its two per cent dividend payable on December 18, the Pennsylvania sent their dividend checks by clipper plane for the first time, in order

to avoid the hazards of war. The British checks, payable in sterling to 1201 stockholders in England, Scotland and Wales, owning 123,569 shares, were shipped by plane to Lisbon, Portugal, enroute to London, on December 3. They are drawn on the Midland Bank of London, which for many years has handled the railroad's dividend disbursements in Great Britain.

Some other foregin holders, on account of federal restrictions against sending money into the recently subjugated countries, will be doomed to at least temporary disappointment, while all other aliens will have the amounts remitted to them reduced by the "withholding taxes" levied by the United States government. Altogether 284 stockholders, whose shares of the dividend aggregate \$8,536, are located in the countries recognized as being for the

For the month of Sept.

time in a state of subjugation; namely, France, Monaco, Belgium, Luxemburg, Holland, Norway, Denmark and Roumania. The railroad is prohibited from making any payments to these stockholders until the federal restrictions are lifted.

September's Net Income Was \$30,732,608

Class I railroads reported for September a net income after fixed charges of \$30,-732,608, as compared with a net income of \$41,262,297 in September, 1939, according to the Interstate Commerce Commission's monthly compilation of selected income and balance sheet items. The year's first nine months showed a net income of \$58,598,060 as compared with a net deficit of \$31,754,-549 for the first nine months of 1939.

The roads not in receivership or trus-

For the nine months of

SELECTED INCOME AND BALANCE-SHEET ITEMS OF CLASS I STEAM RAILWAYS IN THE UNITED STATES

Compiled from 131 Reports (Form IBS) Representing 136 Steam Railways (Switching and Terminal Companies Not Included) ALL CLASS I RAILWAYS

	A				
1940	1939		Income Items	1940	1939
\$74,193,234 11,331,009 85,524,243 1,883,644 83,640,599	\$86,529,620 11,035,246 97,564,866 1,865,607 95,699,259		Miscellaneous deductions from income	\$440,433,544 104,349,376 544,782,920 18,754,231 526,028,689	\$355,716,806 100,363,669 456,080,475 17,441,716 438,638,759
		6.	Fixed charges:		,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,
13,046,385	13,945,545		6-01. Rent for leased roads and equipment	104,254,144	104,448,211
37,784,483	38,398,531 131,719		6-02. Interest deductions 6-03. Other deductions	344,372,751	347,097,765 1,194,128
118,844 50,949,712 32,690,887	52,475,795 43,223,464	7.	6-04. Total fixed charges Income after fixed charges	1,134,025 449,760,920 76,267,769	452,740,104 *14,101,345
1,958,279	1,961,167	8.	Contingent charges	17,669,709	17,653,204
30,732,608	41,262,297	9.	Net income	58,598,060	*31,754,549
17,272,940	16,866,171	10.	Depreciation (Way and structures and Equipment)	153,775,463	151,483,534
8,610,853	4,396,123	11	Federal income taxes	43,126,857	19,932,290
1,667,589 75,000	1,777,246 554,325	12.	Dividend appropriations: 12-01. On common stock 12-02. On preferred stock	56,271,318 14,727,271	51,809,441 13,407,083
1.64	1.82		Ratio of income to fixed charges (Item 5 ÷ 6-04)	1.17	.97
			ALL CLASS I RAILWAYS	-	
				Balance at en	d of September
Sele	ected Asset a	nd I	Liability Items ²	1940	1939
13. Investme	ents in stock nies (Total,	s, b	onds, etc., other than those of affiliated unt 707)	\$588,705,937	\$631,338,121
14. Cash				567,437,772	510,424,200
15. Demand	loans and d	epos	its	37,417,770	21,937,402
16. Time dr	arts and depo	osits		27,443,216 99,488,657	22,721,459 64,496,689
18 Loans at	nd hills receive	vahle		2.558.230	1.784.269
19. Traffic a	nd car-service	e ba	lances receivable	2,558,230 67,504,940	1,784,269 62,348,859
20. Net bala	nce receivabl	e fro	om agents and conductors	57,978,917	56,526,957
21. Miscellan	neous account	ts re	ceivable	132,819,769	120,126,906
22. Material	s and suppli	es .		336,063,039	304,638,536
			ceivable	20,156,493 1,458,304	18,474,035 1,350,625
				7,610,252	8,129,621
26. Tota	al current ass	ets	(items 14 to 25)	\$1,357,937,359	\$1,192,959,558
27. Funded	debt maturin	g wi	ithin 6 months ³	\$80,812,797	\$169,444,482
28. Loans at	nd hills paya	ble4		156,676,790	203,869,263
			lances payable	85,880,124	83,284,091
30. Audited	accounts and	was	ges pavable	228,099,144	218,870,479
31. Miscellar	neous account	ts pa	iyable	69,340,125	67,329,098
32. Interest	matured un	paid		40,774,360	39,480,367
33. Dividend	ls matured u	npai	d	13,069,197	10,982,927
			clared	2,446,895	1,338,920
			ed	80,756,078	80,153,588 23,419,200
37. Other cu	arrent liabilit	ies .	1	22,484,635 40,240,677	35,595,367
38. Tota	d current lia	biliti	ies (items 28 to 37)	\$739,768,025	\$764,323,300
39-01.	U. S. Gover	nme	nt taxes	96,462,866 159,022,171	70,496,727 168,501,385

¹Represents accruals, including the amount in default.

² 1939 figures for certain liability items have been revised, for comparative purposes, to conform with changes prescribed in the Uniform System of Accounts by Commission's order of December 6, 1939, effective January 1, 1940.

⁸ Includes payments of principle of long-term debt (other than long-term debt in default) which will become due within six months after close of month of report.

⁴ Includes obligations which mature not more than 2 years after date of issue.

* Deficit or other reverse items.

NET INCOME OF LARGE STEAM RAILWAYS (Switching and Terminal Companies Not Included)

(Statement and Lemm	Net income after depreciation		Net income before depreciation	
,		ne months of		e months of
Name of railway	1940	1939	1940	1939
Alton R. R	*\$1,625,517	* \$970,306	*\$1,430,296	* \$777,523
Atchison, Topeka & Santa Fe Rv. System?	4,913,173	3,251,199	13,902,825	12,117,964
Atlantic Coast Line R. R	* 701,509	* 825,271	835,906	733,693
Baltimore & Ohio R. R	1,110,380	* 4,362,487	6,538,609	1,019,105
Boston & Maine R. R. Central of Georgia Ry.**	786,863	* 94,814	1,874,580	1,059,840
Central of Georgia Ry.**	* 1,786,356	* 2,111,712	* 1,147,415	* 1,473,222
Central R. R. of New Jersey** Chesapeake & Ohio Ry. Chicago & Eastern Illinois Ry.** Chicago & Northwestern Ry.**	* 2,595,080	* 2,613,630	* 1,563,176	* 1,562,240
Chesapeake & Ohio Ry	25,337,029	16,454,501	31,665,459	22,638,919
Chicago & Eastern Illinois Ry.**	* 1,215,818	* 1,305,610	* 761,667	* 852,599
Chicago & Northwestern Ry.**	* 5,952,693	* 9,506,700	* 2,241,291	* 5,790,818
Chicago, Burlington & Quincy R. R Chicago Great Western R. R. **	200,843	* 123,151	4,238,583	3,783,704
Chicago Great Western R. R.**	* 585,841	* 350,811	* 164,002	51,612
Chicago, Milwaukee, St. Paul & Pacific R. R.**	* 9,386,606	*14,173,668	* 4,915,064	* 9,835,791
Chicago, Rock Island & Pacific Ry.**	* 5,833,064	* 7,387,420	* 2,712,366	* 4,313,366
Chicago, St. Paul, Minneapolis & Omaha Ry	* 1,853,315	* 2,168,335	* 1,428,365	* 1,733,722
Delaware & Hudson R. R	1,261,872	909,979	2,068,039	1,668,340
Delaware, Lackawanna & Western R. R	* 837,181	* 1,291,534	1,006,673	535,418
Denver & Rio Grande Western R. R. **	* 3,570,430	* 4,206,804	* 2,638,060	* 3,300,664
Elgin, Joliet & Eastern Ry	2,199,808	917,452	2,964,810	1,631,470
Erie R. R. (including Chicago & Erie R. R.)z.	* 1,114,767	* 3,037,049	1,620,556	* 280,819
Grand Trunk Western R. R	* 495,051	* 2,531,905	391,194	* 1,657,967
Great Northern Ry	6,451,124	1,764,306	9,233,212	4,529,296
Illinois Central R. R	* 2,088,220	* 957,772	2,692,261	3,951,971
Lehigh Valley R. R	* 481,149	* 882,634	1,079,642	703,176
Long Island R. R	* 887,940	* 1,103,664	* 7,961	* 220,873
Louisville & Nashville R. R	5,966,942	3,849,229	9,230,419	7,101,026
Minneapolis, St. Paul & Sault Ste. Marie Ry. **.	* 3,170,226	* 4,493,662	* 2,254,541	* 3,579,260
Missouri-Kansas-Texas Lines	* 2,488,822	* 2,731,867	* 1,603,675	* 1,742,537
Missouri Pacific R. R.* New York Central R. R.‡ New York, Chicago & St. Louis R. R.	* 9,570,624	*11,315,203	* 6,203,143	* 8,045,448
New York Central R. R	2,735,921	* 5,779,923	14,697,514	* 6,120,553
New York, Chicago & St. Louis R. R	1,460,000	588,309	2,651,183	1,761,583
New York, New Haven & Hartford R. R	* 3,765,069	* 3,981,788	* 1,276,324	* 1,451,100
Nortolk & Western Ry	24,143,450	18,866,206	28,820,079	22,658,799
Northern Pacific Ry	* 1,296,264	* 4,527,828	1,248,797	* 1,992,584
Pennsylvania R. R	44,/10,39/	14,770,543	43,160,271	34,709,973
Pere Marquette Ry	530,255	* 697,665	2,230,579	1,071,136
Pittsburgh & Lake Erie R. R	3,518,567	1,463,740	5,177,581	3,145,638
Reading Co	4,061,262	2,578,494	6,344,912	4,911,925
St. Louis-San Francisco Ry.**	* 6,900,186	* 7,653,964	* 4,616,235	* 5,355,096
St. Louis, San Francisco & Texas Ry	* 212,390	* 150,670	* 212,251	* 150,046
St. Louis Southwestern Lines**	* 571,174	* 1,979,814	* 93,512	* 1,515,611
Seaboard Air Line Ry.¶	* 4,833,558	* 5,177,247	* 3,072,347	* 3,560,884
Southern Ry.	2,179,605	1,604,488	4,826,261	4,210,268
Southern Pacific Transportation Systems	58,955	1,724,389	6,001,422	7,608,785
Texas & Pacific Ry.	696,234	219,593	1,610,390	1,121,354
Union Pacific R. R. (including leased lines)	8,443,989	9,487,884	14,200,988	15,037,171
Wabash Ry.¶	* 3,136,821	* 4,108,451	* 1,515,212	* 2,496,353
Yazoo & Mississippi Valley R. R	* 432,161	* 361,003	* 53,797	6,295

teeship had a net income of \$32,319,943 as compared with \$42,741,400 for the same month of last year; while the net income for the first nine months of this year was \$133,001,399 as contrasted with \$63,840,796 for the same period last year.

Eighty-one roads reported net income for September, while 47 reported net deficits; in September, 1939, there were 88 net incomes and 40 net deficits. For this year's first nine months 62 reported net incomes and 66 had net deficits, as compared, respectively, with 72 net incomes and 56 net deficits in the first nine months of 1939. The consolidated statement for all Class I roads and that showing net incomes or deficits of roads having annual operating incomes over \$25,000,000 are given in the accompanying tables.

Correction

Owing to an error in compilation, the statistics which appeared in conjunction with the Silver Meteors of the Seaboard

Railway in the Passenger Progress issue of Railway Age for November 16, page 727, were incorrect. The passenger traffic department of the Seaboard has since furnished corrected figures which show that the passenger revenue per train mile was \$2.73 rather than \$1.78 as shown. correct figure for train miles over Seaboard rails only for the period from February 2, 1939, through June 30, 1940, is 694,406.

Credit for Military Service Under Retirement Act

Representative Van Zandt, Republican of Pennsylvania, inserted in the appendix to the December 12 issue of the Congressional Record an analysis, prepared by Murray W. Latimer, chairman of the Railroad Retirement Board, giving details of the recent amendment to the Railroad Retirement Act whereby certain military service rendered prior to January 1, 1937, has become creditable toward retirement bene-

fits. Calling attention to the fact that the World-War amendment makes service creditable, Mr. Van Zandt said that approximately 25,000 railroad employees will benefit.

With respect to meeting the cost of crediting the military service, Chairman Lati-mer's analysis said: "The legislative history of the military-service amendment makes it clear that the additional cost will be met from general government revenues. Taxes on employees and employers will not be af-

Effective Date of Water Carrier Act Is Postponed

The Interstate Commerce Commission has entered an order postponing the taking effect of certain provisions of Part III of the Interstate Commerce Act, relating to the regulation of water carriers in interstate and foreign commerce, as authorized by section 202 of the Transportation Act of 1940

Under this order sections 306 (e) and 307 (h) and (i) will become effective March 1, 1941, and all the other provisions referred to in the commission's order will become effective February 1, 1941. The statement of Secretary Bartel, which accompanies the order, says that no further postponement is contemplated at this time.

"The principal effect of the order," con-tinues Secretary Bartel's statement, "is to defer the filing of schedules of minimum rates or charges of contract carriers by water until March 1, 1941, and the filing of tariffs of common carriers by water until February 1, 1941. The order also has the effect of extending until June 1, 1941, the time within which applications for certificates of public convenience and necessity to common carriers and permits to contract carriers must be filed by applicants desiring to assert 'grandfather' rights under section 309 (a) or 309 (f). required application blanks will be available in due course before February 1,

N. Y. Railroad Club Dinner Enjoyed By 3,000

More than 3,000 railroad and railroad supply men attended the big 68th annual dinner of the New York Railroad Club at the Hotel Commodore, New York, on De-cember 12. George W. Jones, retiring president of the club and vice-president, Brooklyn-Manhattan Transit Corporation, presided. As has been the custom in recent years, no addresses were presented at the affair and guests, following a program of vaudeville entertainment, took the opportunity to renew acquaintanceships. During the dinner a collection was taken up for the benefit of the British-American Ambulance Corps to supply ambulances to Great Britain and Greece, under the sponsorship of C. A. Gill, general manager, Reading, and former president of the club.

The club on November 9 elected the following officers for the ensuing year: President, W. G. Curren, general manager, New York terminal lines, Baltimore & Ohio; First Vice-President, C. C. Hubbell, general purchasing agent, Delaware, Lackawanna & Western; Second Vice-President, A. E. Calkins, superintendent of

o citl

equipment, New York Central; Executive Secretary and Treasurer, D. W. Pye, president, Tuco Products Corporation (reelected). H. H. Vreeland was re-elected chairman of the executive committee.

September Bus Revenues 1.9 Per Cent Below 1939

Class I motor carriers of passengers reported September revenues of \$10,911,414 as compared with \$11,121,902 in September, 1939, a decrease of 1.9 per cent, according to the latest compilation prepared by the Interstate Commerce Commission's

in the same month of 1930. Operating revenues of those roads in November, 1940, were 1.3 per cent above those for November, 1939, and 5.7 per cent below November, 1930.

Freight revenues of the 84 Class I roads in November, 1940, amounted to \$254,954,834 compared with \$252,608,125 in November, 1939, and \$252,640,563 in November, 1930. Freight revenues in November, 1940, were 0.9 per cent above the same month of 1939, and 0.9 per cent above the same month in 1930.

Passenger revenues in November, 1940,

	Passenger revenue		Passengers carried	
	September	September	September	September
	1940	1939	1940	1939
New England Region Middle Atlantic Region Central Region Southern Region Northwestern Region Mid-Western Region Southwestern Region Southwestern Region Rocky Mountain Region Pacific Region	\$596,566	\$644,029	1,056,592	1,019,511
	1,689,041	1,929,644	2,917,274	2,796,472
	2,064,130	2,078,486	2,749,782	2,081,115
	2,438,172	2,224,541	2,912,082	2,560,818
	427,027	480,840	324,147	341,258
	916,632	936,769	570,546	574,349
	1,245,713	1,261,486	1,242,597	1,256,236
	119,001	125,809	80,561	86,730
	1,415,132	1,440,298	1,547,330	1,406,687

Bureau of Statistics from 144 reports representing 145 bus operators. (In the same month, railroad passenger revenues were almost 3 per cent under those of September, 1939.) Passengers carried increased 10.5 per cent, from 12,123,176 to 13,400,911.

The breakdown by regions of the bus revenue and traffic figures, which exclude data on charter or special party service, is given in the accompanying table.

0

n

y

g

s l,

-

0

ts

1-

1.

ed

ad

ial

at

eng

nt,

re-

am

op-

ur-

up can to

onger,

ub.

fol-

res-

ger,

pell,

ick-

esi-

of

8

Railroads Observe Christmas

A number of the country's railroads will mark the Christmas season with special decorations, musical programs and other features outside the orbit of regular corporate practice, the offer of low round-trip fares and the gift of cent-a-mile travel to the armed forces. The Baltimore & Ohio will again follow its 17-year-old custom of installing lighted and tinseled trees in observation and buffet lounge cars and holly wreaths and bells will be hung in all reclining seat coaches. As a newer wrinkle, stewardess-nurses and train secretaries will distribute candy to the younger patrons.

Daily programs of electric organ music have been heard since Thanksgiving in Grand Central and Pennsylvania stations in New York and, in addition, the Pennsylvania presented a chorus of 150 Girl Scouts in a program of Christmas carols on December 19. The Boston & Maine has continued its daily carol-singing programs for homeward-bound commuters at Boston, Mass., while radio stations rebroadcast recordings of their efforts every evening for the "artists" and their families to admire

November Operating Revenues Up 13 Per Cent Over 1939

Preliminary reports from 84 Class I rail-roads, representing 81.9 per cent of total operating revenues, received by the Association of American Railroads, show that those roads, in November, 1940, had estimated operating revenues amounting to \$305,236,870 compared with \$301,466,452 in the same month of 1939, and \$323,674,466

according to these preliminary reports, totaled \$26,300,039 compared with \$24,931,-063 in November, 1939, and \$41,308,884 in November, 1930. For the month of November, 1940, they were 5.5 per cent above the same month in 1939, and 36.3 per cent below the same month in 1930.

Federal Trade Issues Report on Equipment Companies

The Federal Trade Commission has issued a 20-page report giving financial statistics for 11 of the "principal" railroad equipment manufacturing corporations for the calendar years 1938 and 1939. The

report, in the words of the commission, contains "the combined financial data (consisting of a combined balance sheet, combined income and expense and surplus statements, with ratios and percentages derived from the basic data) for 11 of the principal manufacturers operating in the 'Railroad Equipment' industry."

'Railroad Equipment' industry."

The term "railroad equipment" as used in the report "refers to corporations that are engaged primarily in the production and sale of electric and steam railroad cars, not built in railroad repair shops; railroad, mining, and industrial locomotives, not built in railroad repair shops; and air brake and signal equipment for electric and steam railroads."

The report shows that the combined net income, before deduction of interest on long-term borrowings and income taxes, on the average total capital of \$439,131,334 employed by the 11 corporations in 1939 was \$9,987,307, or a rate of return of 2.3 per cent. This average rate of return, continues the report, represented individual rates for the 11 corporations ranging from (low to high) a loss of 3.1 per cent to a profit of 7.1 per cent. Five of the 11 corporations had rates of return higher than the average and these rates ranged from 2.4 per cent to 7.1 per cent. Three of the remaining corporations had rates of return ranging from a profit of 0.3 per cent to 1.1 per cent, while the other three corporations had a loss.

The 11 companies realized a net income, after provisions for the payment of income taxes and deduction of profits accruing to minority interest, amounting to \$6,152,297 for 1939. The report also shows that the combined cash dividends paid, or accrued, in 1939, on preferred shares amounted to \$422,190, and on the common shares, \$5,-

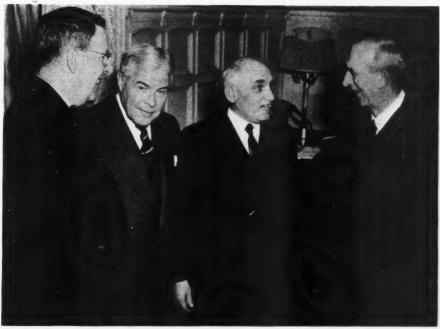


Photo by Bill Robinson, Canadian National

Canada's Transportation Leaders Meet in Montreal

Prominent Canadian railroad men greeted P. J. A. Cardin, Dominion Minister of Transport and Public Works, when he was the guest of honor and speaker at a recent meeting of the Canadian Railway Club at Montreal, Que. Photographed just preceding the meeting, they are (from left to right): John Armstrong, chief engineer, Canadian Pacific, and president of the Canadian Railway Club; Sir Edward Beatty, chairman and president, Canadian Pacific; Mr. Cardin; and S. J. Hungerford, chairman and president, Canadian National.

015,928. Long-term interest and amortization of debt discount amounted to \$1,914,-013 in 1939.

Total net sales for 1939 for the 11 companies amounted to \$160,711,439, while the costs and expenses applying to the goods sold in 1939, or the total operating outgo (including raw materials, wages, taxes, depreciation, and so forth), amounted to \$156,467,453.

Central Advisory Board Meets at Cheyenne

Carloadings in Colorado, Idaho, Nebraska, Utah and Wyoming will increase 96 per cent in the first quarter of 1941 as compared with the same period in 1940, according to a forecast made at the forty-second regular meeting of the Central Western Shippers' Advisory Board at Cheyenne, Wyo., on December 11. Lime and plaster shipments are expected to increase 49.6 per cent; hay, straw and alfalfa, 36.6 per cent; lumber and forest products, 32.9 per cent; ore and concentrates, 26.8 per cent; and automobiles, trucks and parts, 22.9 per cent.

At the morning session, "Progress in

Tariff Simplification," was discussed by W. Ebers, general freight agent of the Union Pacific and "National Transportation Conditions" were described by L. M. Betts, manager of the Car Service division of the Association of American Railroads. At a luncheon sponsored by the Rotary Club of Cheyenne, and the Cheyenne Chamber of Commerce, the speakers were John A. Reed, Wyoming State Chairman of the board, whose subject was "The Importance of Efficient Railroad Transportation to Wyoming," and Samuel O. Dunn, editor of the Railway Age and chairman of the board of the Simmons-Boardman Publishing Corporation, who discussed "The Economic Problems of Preparedness." An abstract of Mr. Dunn's paper appeared in the Railway Age of December 14, page 909.

Mr. Reed portrayed the importance of railroads in the development of a community, saying that the growth and development of Wyoming was dependent almost entirely upon accessible, and, of late years, gradually increased rapid transportation. He also showed how the railways through their payrolls and purchases are the main stays of many communities.

Freight Car Loading

Loadings of revenue freight for the week ended December 14 totaled 736,332 cars, the Association of American Railroads announced on December 19. This was a decrease of 2,181 cars, or 0.3 per cent, below the preceding week, but an increase of 58,200, or 8.6 per cent, above the corresponding week last year and an increase of 130,329 cars, or 21.5 per cent, above the comparable 1938 week.

As reported in last week's issue, the loadings for the previous week ended December 7 totaled 738,513 cars, and the summary for that week, as compiled by the Car Service Division, A. A. R., follows:

Revenue Freight Car Loadings

ded Saturd	lay, Decemi	ber 7
1940	1939	1938
158,265 153,806 46,725 114,393 89,821 119,283 56,220	147,191 149,405 44,031 102,025 82,002 107,842 51,477	131,962 114,316 43,168 95,456 75,869 108,085 50,108
265,324	241,321	234,062
738,513	683,973	618,964
35,465 15,596 148,406 12,567 39,833 12,374 155,037 319,235 738,513 728,525 733,488 745,295 778,318	38,310 14,971 125,641 12,034 34,996 11,858 154,216 291,947 683,973 685,496 673,113 766,987 781,588	34,413 14,546 127,841 6,754 28,043 10,281 151,328 245,758 618,964 648,534 561,658 657,066
	1940 158,265 153,806 46,725 114,393 89,821 119,283 56,220 265,324 738,513 35,465 15,596 148,406 12,567 39,833 12,374 155,037 319,235 738,513 728,525 733,488 745,295	158,265 147,191 153,806 149,405 46,725 44,031 114,393 102,025 89,821 82,002 119,283 107,842 56,220 51,477 265,324 241,321 738,513 683,973 35,465 38,310 15,596 14,971 148,406 125,641 12,567 12,034 39,833 34,996 12,374 11,858 155,037 154,216 319,235 291,947 738,513 683,973 728,525 685,496 733,488 673,113 745,295 766,987

Cumulative Total, 49 Weeks.... 34,374,215 32,033,910 28,777,422

In Canada.—Carloadings for the week ended December 7 totaled 60,725, compared with 50,390 a year ago and 61,121 in the previous week, according to the compilation of the Dominion Bureau of

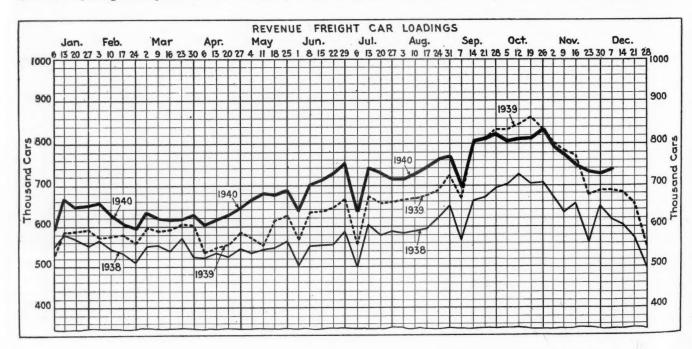
Total for Canada:	Total Cars Loaded	Total Cars Rec'd from Connections
Dec. 7, 1940 Nov. 30, 1940 Nov. 23, 1940 Dec. 9, 1939	61,121 63,088	28,190 27,309 27,369 24,740
Cumulative Totals for Can		
Dec. 7, 1940 Dec. 9, 1939 Dec. 10, 1938	2,418,349	1,218,581 1,058,433 1,012,464

Emergency Railroad Rates for Scrap Seen a Possibility

That the railroads may be asked to publish low emergency freight rates to move scrap iron and steel from "remote" districts of the country to consuming districts as a national defense measure was discussed as a distinct possibility by E. C. Barringer, executive secretary of the Institute of Scrap Iron & Steel, in an informal talk before the Southern chapter of the Institute at Charlotte, N. C., on December 15. The speaker revealed that the National Defense Advisory Commission is currently considering such a move to tap areas for scrap which hitherto have not moved this commodity to domestic steel producing districts by rail.

Pointing out that the commission has "put it up" to the Institute to fulfill current scrap needs, Mr. Barringer expressed the certainty that there is enough scrap in the country if it can be removed from remote points at rates which will bring its final sale price to a reasonable level. He has indicated to the commission that onehalf million tons on the Pacific coastwhich area exported to Japan before the embargo cut off trade with that countrywould be available for mid-Western mills if it could move on a lower railroad freight rate. He pointed out also that scrap that formerly moved through Gulf and South Atlantic ports could no longer be exported, due to restrictions in shipping and likewise could be gathered for national defense needs if freight rates permitted.

The speaker emphasized that the industry will not seek general reductions in scrap rates, but is sounding out the pos-



sibilities of emergency rates, perhaps to cover trainload movements, which would apply to specific points on a short time basis. He explained that steel mills would be willing to pay somewhat higher prices for scrap from distant points than from their normal gathering districts, but that they would not be able to pay present rates for the longer distances. He considers it possible that the government might be asked to make up some of the loss which might be incurred by the railroads in moving the traffic at lower rates.

Equipment Installed and on Order

Class I railroads put 59,473 new freight cars in service in the first 11 months of 1940, according to the Association of American Railroads. In the same period last year, 20,085 new freight cars were put in service.

Of the total number of new freight cars installed in the first 11 months of this year, there were 29,650 box, 27,028 coal, 1,055 flat, 646 refrigerator, 388 stock and 706 miscellaneous cars.

The railroads also put in service in the first 11 months this year 367 new locomotives, of which 104 were steam and 263 were electric and Diesel-electric. Installed in the first 11 months last year were 310 new locomotives of which 94 were steam and 216 were electric and Diesel-electric.

New freight cars on order on December 1, amounted to 30,684, compared with 27,459 on November 1, and 36,198 on December 1, 1939. New cars on order on December 1, this year included 15,649 box, 13,983 coal, 50 stock, 487 flat and 500 refrigerator cars.

Class I roads on December 1, had 182 new locomotives on order, of which 116 were steam and 66 were electric and Diesel-electric. On November 1, there were 196 new locomotives on order, of which 131 were steam and 65 were electric and Diesel-electric. New locomotives on order on December 1, last year, totaled 115, which included 44 steam and 71 electric and Diesel-electric.

d

Thousand

Freight cars and locomotives leased or otherwise acquired are not included in the above figures.

Union Bus Terminal in New York to Be Country's Biggest

A \$4,000,000 bus terminal to be used by all out-of-town buses—both long and short haul—entering Manhattan Island is up for immediate consideration by New York City's Board of Estimate. The proposed terminal would be built and operated by the Times Square Terminal, Inc., a new corporation, headed by Harold W. McGraw, an official of the McGraw-Hill Publishing Company, Inc., publishers of "Transit Journal" and "Bus Transportation."

The city is expected to give approval very shortly to the project, inasmuch as some months ago it issued regulations, effective January 1, barring all interstate and interurban buses from the adjacent midtown area. It is understood that this date will be advanced to coincide with completion of the new terminal. Planned to be placed in service in about nine months, the new terminal will be situated on a plot bounded by 8th and 9th avenues and 41st and 42nd streets containing 58,000 sq. ft.

and having 300,000 sq. ft. of floor space. Access would be made to it by New Jersey buses directly from the adjacent Lincoln tunnel, while other lines would make use of a new 500-ft. approach tunnel—estimated to cost about \$600,000—to be built by the city and paid for by tolls.

The ground floor would be devoted entirely to concourse and waiting room facilities; the first underground level will contain 17 bus lanes and platforms for loadings and unloadings; and the second underground level will be used for storage. It is estimated that 600 buses per hour can be accommodated.

These Roads Had 15 P. C. Rise in October Passenger Income

A substantial number of roads enjoyed increases of 15 per cent or more in passenger revenues in October as compared with last year. Highest percentage increase of any road having monthly passenger revenues of \$100,000 or more was the Colorado & Southern-Fort Worth & Denver City, which took in 38.2 per cent more in October, 1940, than October, 1939. Close second was the Florida East Coast with a 38 per cent increase. Third highest in this category was the Atlantic Coast Line with a rise of 27.8 per cent.

Roads having monthly revenues of between \$25,000 and \$100,000 were led by the St. Louis Southwestern whose October record was 114.3 per cent higher than a year ago. Roads with passenger receipts under \$25,000 a month frequently show wide variations in revenues from month to month due to the abnormal effect of special movements (troop trains, for example) on a slim total business. One such line—the Gulf & Ship Island—had a 255.6 per cent jump in its October revenues.

Roads in the country which had an increase of 15 per cent or more in October passenger revenues, together with percentage increase in first 10 months over same period of 1939, are as follows:

Road	'40 Over Oct. '39	Months '40 over '3
Revenues over \$100,000	per mont	h
C. & SF. W. & D. C Florida East Coast Atlantic Coast Line Seaboard Air Line Chesapeake & Ohio Central of Georgia	38.0 27.8 22.9 18.6	14.2 28.5 19.8 19.7 9.1 11.0
Revenues \$25,000-\$100,	000 per me	onth
St. Louis Southwestern Kansas City Southern N. Y. Susquehanna & W.	. 39.6	18.0 53.4 9.0
Revenues under \$25,00	00	
Gulf & Ship Island Louisiana & Arkansas N. Y. Ontario & W Georgia	. 134.9	34.4 28.5 decrease 28.6

Further Development of Aviation Is Urged

The continuation of development of civil aeronautics, in the interest of defense as well as to meet commercial requirements, is held by the Transportation Committee of the Chamber of Commerce of the United States to be a national necessity. The committee's position is put forward in a report, "Civil Aeronautics During Preparations for National Defense," which has been approved by the Chamber's board of directors.

"The air transport lines," the committee

declares, "should be permitted to carry on replacement policies and to expand normally wherever consistent with defense needs. Thus, they can meet the increasing demands for swift transportation growing out of the defense program, provide a larger reserve of airline equipment and crews for emergency military transport purposes and furnish types of military air personnel training which the airlines are specially qualified to conduct and are conducting."

The report cites the recently approved plan of the Priorities Board, which provides for release by the airlines of certain equipment already purchased or on order, for temporary preference for military uses and for continued study of ways to meet airline needs. This plan, it is pointed out, provides reconciliation of the most urgent needs of both military and civil aviation.

The Chamber's committee, however, in the interest of both military and civil aviation, urges that the plan be so administered as to permit adequate allocations of equipment to the airlines.

Pointing out that a somewhat similar situation exists with regard to airports, the committee states that, where displacement of civil by military aviation at airports is necessary for defense purposes, substitute facilities should be made available as quickly as possible by the federal government.

The report describes changes in the federal setup for regulation of civil aviation, following the transfer of the Civil Aeronautics Authority to the Department of Commerce under Presidential Reorganization Order No. 4. The committee stresses the importance of the inspection service of the Civil Aeronautics Administration as affecting safety and urges that special attention be given to the adequacy of this service, particularly in view of the large increase which has been taking place in civilian flying.

Senate Receives Three More Wheeler Reports

Senators Wheeler and Truman this week submitted to the Senate three more reports assailing the use of holding companies to control railroad properties. These reports, numbered 25, parts 25, 26, and 27, deal with the subject of the Alleghany Corporation and bear the subtitles, "Midamerica Corporation: Its Uses as a Holding Company"; 'Sale by George A. Ball; Tax Avoidance Through Charitable Foundations"; and "Acquisition of Control by Robert R. Young". The data contained in them were adduced from Senator Wheeler's investigation of railroad holding companies several seasons ago and the theme of them all is that railroad holding companies should either be drastically controlled or abolished.

Characterizing Midamerica Corporation as "made to order for the Ball-Van Sweringen interests as an instrument for controlling the vast Alleghany system", part 25 of the report goes on to assert that the committee's investigation failed to disclose any "useful" functions performed by Midamerica during the ownership by George A. Ball, Indiana glass jar manufacturer.

"Midamerica" continues part 25, "made trifling loans to subsidiary real estate companies and holding companies, and it main-

tained a brokerage account for stock market speculation. But it made no loans to its railroads, nor did it contribute anything of value to the transportation business and the far-flung enterprises it controlled. In short, Midamerica was a parasitical 'convenience corporation' which made it possible for \$15,000 of Midamerica's stock to control \$3 billions of assets (much of which, however, were subject to the jurisdiction of various bankruptcy courts or otherwise encumbered)."

"Midamerica was constructed in accordance with the familiar holding company practice of vesting control in a comparatively minute investment. When \$15,000 can maintain such control and, with it, the right to influence disbursements of a quarter of a billion dollars annually for railroad salaries and supplies alone, as was possible in the case of Midamerica, there results a dangerous concentration of power in the hands of individuals and the temptation to

misuse that power".

The conclusion of part 25 is that existing laws which permit the passing of railroad and related properties from holding company to holding company beyond the reach of the Interstate Commerce Commission, should be amended in the public interest. Holding companies, as such, it avers, have proved to be obstacles to the sound development of the railroad industry.

In part 26 the assertion is made that "George A. Ball, who created a super holding company as an instrument for controlling the railroad and other properties in the Alleghany system, created another super holding company, the George and Frances Ball Foundation, by which it was possible to avoid the payment of taxes on profits resulting from the sale of the Alleghany properties". After pointing out that Mr. Ball purchased certain large and controlling blocks of Alleghany securities at auction on September 30, 1935, and later sold these securities on May 5, 1937 at a profit of \$5,000,000, or 1,200 per cent, the report charges that "through the use of a holding company and of a 'charitable, educational, and religious foundation' which he completely dominates, he would be able to avoid the necessity of paying either income tax or inheritance tax on his large profits".

"It is true", the report admits, "that at some undetermined time in the future the \$5,000,000 will presumably be used for charitable, educational, and religious purposes. But meanwhile the sum, with the vast power it entails, remains firmly under the control of Mr. Ball, tax-free."

"The charitable, educational, and religious purposes which the George and Frances Ball Foundation is supposed to promote may be postponed indefinitely. Meanwhile. similar purposes which income and inheritance taxes would have served must be curtailed, or the tax bills of others increased to offset such avoidance.

This report reaches the conclusion that "The use of holding companies and "charitable, religious, and educational foundations' for tax avoidance deserves careful study."

Part 27 describes the acquisition of control of the Alleghany Corporation by Robert R. Young, New York financier, by a personal investment of \$255,000 in Alleghany's voting stock. This report then quotes a statement of Mr. Young's before the Senate subcommittee in which he is reported to have made the following comment on his control of Alleghany and its many assets:

"I think it is a bad thing for any individual to have such power. I think it is

"Mr. Young", say Senators Wheeler and Truman, "acquired for \$255,000 not only voting stocks, but sweeping power over a great railroad system. suggesting that this power was misused in this manner, it may be noted that a one per cent commission on the annual expenditures for coal required by the Alleghany railroads would alone have exceeded what Mr. Young's investment cost him. Power of this kind is something which should not be offered for private sale to the highest bidder. Such power should not be passed from hand to hand under circumstances which preclude the supervision of agencies of government charged with watching the public interest."

"The danger that ruthless power over railroad systems might be acquired by unscrupulous persons who would not hesitate to misuse it is of the gravest social concern. So long as such a possibility exists through the manipulation of holding companies, there is an implied invitation to disregard the rights of investors and to subject the public to reckless or selfish ad-The dangers revealed by the subcommittee's reports on holding company control of railroads should be guarded against by the prompt enactment of suitable legislation."

The senators say that further reports will be submitted shortly showing the subsequent history of Alleghany.

> K. C. Produce Case in Supreme Court

(Continued from page 959)

mand an injunction against a carrier seeking only to serve a competing market by means of an extension not authorized by the I. C. C."

In this case the Union Pacific proposed to extend its line to a new produce terminal being constructed by the City of Kansas City, Kans., with the aid of a Public Works Administration grant-in-aid. The court below sets out in its summation of the bill of complaint that the new terminal will cost \$4,000,000, of which \$1,710,000 is a grant from the P. W. A. and the balance will be procured by the sale of the city's bonds to the Union Pacific. The complaint also set out that the proposed extension would cost some \$500,000 and is an extension for which the company had obtained no authority from the Interstate Commerce Commission.

The complainants further alleged that their businesses would be seriously affected by the proposed extension and that there was no need for the proposed terminal. The defendant railroad answered that the plaintiffs were not "parties in interest" within Paragraph 20, section 402 of the Transportation Act and had no right to The federal district court and the circuit court of appeals sustained this position. As a result, the question before the court was solely one of whether or not the complainants were entitled to maintain the suit. As pointed out above, the majority of the court decided that they had no real interest in the suit. However, Justice Stone took a different view, writing a dissenting opinion in which he maintained that they should have such a right. Chief Justice Hughes and Justice Reed joined in this expression.

Meanwhile, at the same session the court noted probable jurisdiction in another case which directly involves the same set of facts which formed the subject matter of the Singer case. In this case of the City of Kansas City, Kans., vs. the United States, the Interstate Commerce Commission last summer obtained from the United States District Court for the Western District of Missouri an injunction permanently enjoining the City, railroad companies and produce dealers from "offering, granting or receiving cash payments or rental credits, reduced rates, unsecured or inadequately secured loans or other valuable considerations in an effort to induce the movement of produce dealers to a wholesale produce terminal in the city." The order also required that rentals for the use of facilities in the terminal be in an amount that will not constitute a rebate or concession in violation of the Elkins Act.

In a concurring opinion in the Singer case, Justice Frankfurter added a footnote in which he explained that with reference to the actual circumstances themselves, "the Attorney General has chosen a different remedy to protect the public interest," that of an injunction under the Elkins Act rather than contesting the legality of the

The court also decided to review the case of Negro Congressman Mitchell of Illinois who, for the last two years, has been unsuccessful before the commission and in the courts in forcing the southern roads to provide first class Pullman accommodations for colored people equal to those furnished white passengers.

The case arose on the Chicago, Rock Island & Pacific when Mr. Mitchell was forced to ride in a "Jim Crow" car in the state of Arkansas despite the fact that he held a first class ticket from Chicago, Ill., to Hot Springs, Ark., and had ridden in a Pullman car from Chicago to Memphis, Tenn., on the Illinois Central. Both the commission and the federal district court in Chicago have dismissed his complaint which alleges discrimination.

Automotive Engineers to Meet January 6-10

The Society of Automotive Engineers will hold its next annual meeting at the Book Cadillac hotel, Detroit, Mich., January 6 to 10, inclusive. Among the items on the tentative program, of interest to railroad men, will be a truck, bus and rail car session at 10 a. m. on January 7, during which C. M. Noble, of the Pennsylva-Turnpike Commission, will discuss "Toll Roads and Truck and Bus Transportation," and a session on fuel and lubrication at 2 p. m. on January 10, during which J. G. McNab, W. C. Winning, B. G. Baldwin and F. L. Miller, Standard Oil Development Company, will discuss "Lubrication of Severe-Duty Diesel Engines."

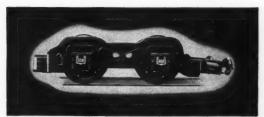
DO THEY MEAN AN ADDITIONAL LOCOMOTIVE

OR ARE THEY

EXTRA PROFIT



Scheduled freights are being more heavily loaded as traffic increases. If your power is capable of handling additional cars it saves running an additional locomotive. » » » To augment their locomotives and give extra starting power, progressive railroads have installed The Locomotive Booster*. The Booster, by capitalizing idle weight and spare steam gives the necessary added power to haul those "extra" cars that mean the difference between greater profits and small returns. Increase your income by installing The Booster... Haul today's increased loads profitably.



*Trade Mark Registered United States Patent Office



FRANKLIN RAILWAY SUPPLY COMPANY, INC.

NEW YORK CHICAGO MONTREAL

Equipment and Supplies

Northern Pacific Places Large Freight Car Order

The Northern Pacific has ordered 2,500 freight cars, placing 1,000 50-ton box cars, 300 50-ton hopper cars and 200 70-ton ballast cars with the American Car & Foundry Co.; 900 50-ton box cars with the Pullman-Standard Car Manufacturing Company, and 100 50-ton box cars with the railroad's shops at Laurel, Mont.

Mo. P. Seeks to Spend \$4,804,050 for Cars and Locomotives

The Missouri Pacific has received permission from the district court to secure competitive bids for 18 Diesel-electric switching locomotives, 1,302 freight cars and one rail motor car to cost approximately \$4,804,050 for use on the M. P. and its subsidiaries. Included are two 1,000-hp., five 600-hp. and eleven 44-ton Diesel-electric switching locomotives; 1,200 55-ton hopper cars; 100 50-ton box cars, two well type freight cars; and one streamlined rail motor car.

LOCOMOTIVES

THE UNION PACIFIC has ordered ten 1,000-hp. Diesel-electric switching locomotives from the Electro-Motive Corporation.

THE PATAPSCO & BLACK RIVERS has ordered two 1,000-hp. Diesel-electric switching locomotives from the Baldwin Locomotive Works.

The Philadelphia, Bethlehem & New England has ordered two 600-hp. Diesel-electric switching locomotives from the Electro-Motive Corporation.

THE CENTRAL OF GEORGIA has ordered two 600-hp. and one 1,000-hp. Diesel-electric switching locomotives from the Electro-Motive Corporation.

THE AMERICAN STEEL & WIRE Co. has ordered one 660-hp. Diesel-electric switching locomotive from the Baldwin Locomotive Works.

THE INLAND STEEL COMPANY has ordered one 600-hp. Diesel-electric switching locomotive from the Electro-Motive Corporation.

THE CANADIAN CAR & MUNITIONS, LTD., has on order two 300-hp. Diesel-electric switching locomotives with the General Electric Company.

The Seaboard Air Line has ordered one 660-hp. Diesel-electric switching locomotive from the Baldwin Locomotive Works. Inquiry for this locomotive was reported in the Railway Age of November 16, page 776.

THE SAO PAULO-PARANA RAILROAD OF BRAZIL has ordered one 2-8-2 type freight locomotive from the Baldwin Locomotive

Works. This is in addition to one ordered in July as reported in the Railway Age of July 27, page 164.

THE UNITED FRUIT COMPANY has received delivery of four 2-8-2 type freight locomotives from the Baldwin Locomotive Works.

FREIGHT CARS

THE UNION PACIFIC is inquiring for 300 flat cars and 50 mill type gondola cars.

THE UNION PACIFIC has placed an order for 2,000 50-ton box cars with company shops.

THE CHICAGO & NORTH WESTERN is inquiring for 1,000 gondola cars, 200 ore cars and 500 box cars.

THE RUSSIAN GOVERNMENT has ordered 100 steel air-dump cars from the Pressed Steel Car Company.

THE UTAH COPPER Co. has ordered 100 24-ft. 51/8-in. 100-ton steel ore cars and 15 air-dump cars from the Pressed Steel Car Company.

THE WARREN PETROLEUM COMPANY has taken delivery of thirty 11,000-gal. and ten 10,500-gal. steel tank cars from the American Car & Foundry Co.

THE PENNSYLVANIA SALT MANUFACTURING Co. has ordered six 34-ft. 2-in. steel tank cars from the American Car & Foundry Co. This is in addition to two tank cars ordered earlier this year.

THE LITCHFIELD & MADISON has ordered 100 50-ton steel hopper cars, placing 50 with the American Car & Foundry Co. and 50 with the General American Transportation Corporation.

THE CARNEGIE-ILLINOIS STEEL COMPANY has ordered eight 100-ton flat cars from the Pressed Steel Car Co., and one 87-ft. 6-in. flat car from the Greenville Steel Car Company.

The Wabash has ordered five 29-ft. 3-in. steel covered hopper cars of 70 tons' capacity from the American Car & Foundry Co. This is in addition to five reported as ordered from American Car & Foundry Co. in the *Railway Age* of November 30, page 847.

THE ATLANTA & WEST POINT-WESTERN RAILWAY OF ALABAMA has received delivery of two 70 ft. 9-in. steel-baggage express cars from the American Car & Foundry Co. Inquiry for this equipment was reported in the *Railway Age* of May 18, page 875.

IRON AND STEEL

The Baltimore & Ohio has ordered 25,000 tons of rail, placing 16,250 tons with the Carnegie-Illinois Steel Corporation and 8,750 tons with the Bethlehem Steel Company. This is in addition to 18,800 tons placed in October as reported in the Railway Age of October 19, page 569.

Construction

THE BALTIMORE & OHIO.—A contract has been awarded the George F. Hazlewood Company, Cumberland, Md., for construction of an extension to the company's enginehouse at Cumberland, Md., at an estimated cost of \$50,000.

CHICAGO, BURLINGTON & QUINCY.—A contract amounting to approximately \$80,000 has been awarded Smirl & Gibson, Jacksonville, Ill., by the Burlington Transportation Company (motor transport subsidiary of the Chicago, Burlington & Quincy) for the construction of additional truck terminal facilities at Galesburg, Ill. The original one-story office, garage and dock will be enlarged to provide a two-story office and a repair and paint shop for both buses and trucks. The construction will be of steel and concrete with brick walls.

FLORIDA EAST COAST.—This company has under way the construction of a double-track all-welded steel trestle, realinement of main tracks, necessary changes in yard tracks and construction of passenger platforms at St. Augustine, Fla., total cost of which is estimated at \$137,000. The work is being performed by company forces and the Cleary Brothers Construction Company, West Palm Beach, Fla., who have been awarded a contract amounting to \$41,000.

NEW YORK CENTRAL.—The New York State Public Service Commission has authorized company to do certain work in connection with the elimination of grade crossings in the village of Herkimer by direct employment of labor and purchase of materials at estimated cost of \$1,173,700. The commission's approval of these eliminations was reported in the Railway Age of November 30, page 846. The work to be done by company's labor force and engineering staff consists of making temporary and permanent track changes, furnishing and installing bulkhead and roadbed drainage and making temporary and permanent changes in its signal system. Installation of center line monuments, relocation of mile posts and removal of existing crossing facilities are included in the estimate. J. A. O'Connor, the Commission's chief grade separation engineer, pointed out that track and signal materials are manufactured to conform with the railroad company's specifications and that in addition to having the skilled labor to carry out the work economically, the railroad can buy materials in large quantities at a more advantageous price than a contractor.

THE NEW YORK CENTRAL.—A contract has been awarded the Vulcan Steel Products Company, Brooklyn, N. Y., for installation of park fences in Riverside and Ft. Washington parks between West 72nd street and West 181st street, New York City.

WABASH.—A contract has been awarded to the Bates & Rogers Construction Corporation for construction of a freight station at Chicago, at an estimated cost of \$65,000.

Supply Trade

Alex S. Anderson has been appointed district manager for the midwestern territory of the Duff-Norton Manufacturing Company, with headquarters at Chicago.

A. R. Engler has been placed in charge of a new Southwestern district office handling the sales and service of Kearney & Trecker milling machines and Gisholt turret lathes, automatic lathes and balancing machines. Mr. Engler will be located in the West Building, Houston, Tex., and will be assisted by S. Pitzer and Ray Dorow.

Leon F. Payne has been elected treasurer of the Carnegie-Illinois Steel Corporation to succeed Frank C. Harper who will retire December 16 after 32 years of service with the company. Mr. Payne has been vice-president, treasurer and a director of the Oil Well Supply Company, a United States Steel subsidiary, since 1929, and has served in that capacity at Dallas, Tex., since 1932.

T. F. Barton, for the past two years assistant district manager of the New York district of the General Electric Company, has been appointed district manager, effective January 1. Mr. Barton in his new position becomes administrative head of the apparatus sales organization for the states of New York, Connecticut, and northern New Jersey. H. H. Barnes, Jr., for many years commercial vice-president of the New York district, will continue in that capacity.

Fitzwilliam Sargent has been appointed representative of the railroad division of the Edward G. Budd Manufacturing Company, with headquarters at the Philadelphia, Pa., plant. He will be associated with S. M. Felton, eastern sales manager. Mr. Sargent was formerly with the Standard Supply & Equipment Co., from 1915 to 1930, and was president for three years. He has served as sales representative for numerous companies in the railroad supply industry.

d

g - s d

d

i-

n

re

rk

ed

a-

Stockholders of the Wood Preserving Corporation, a Koppers Company subsidiary, at a special meeting at Pittsburgh, Pa., on December 11, voted to liquidate the corporation. Its business will be conducted as an operating and sales division of Koppers Company after December 31. The action was taken in order to simplify the Koppers corporate structure and to further integrate operating and sales activities with other divisions of the Koppers Company. No changes will be made in the general management of wood preserving plants and operations will be continued as at present.

C. N. Thulin, vice-president of the Duff-Norton Manufacturing Company, with headquarters at Chicago, has resigned to become manager of railway sales of the Joyce-Cridlan Company, Dayton, Ohio. Mr. Thulin entered railway service with the Northern Pacific in 1886 and resigned in 1902 to enter the supply business in St. Paul, Minn. He was employed by the Chicago Pneumatic Tool Company for a

number of years and in 1910 became western sales manager of the Duff Manufacturing Company. Later he was elected vice-president of the successor company, the Duff-Norton Manufacturing Company.

James T. Clark, who has been in charge of sales in the northern territory of the Vapor Car Heating Company, Inc., Chicago, with headquarters at St. Paul, Minn., has been promoted to assistant sales manager, with headquarters at Chicago, and has been succeeded by Franklin E. Hess, sales engineer at Chicago. Mr. Clark was born in Dubuque, Iowa, in 1896. In 1912 he entered the employ of the Chicago, Milwaukee, St. Paul & Pacific, and was successively clerk in the car department, car foreman and general car foreman at various points on this road. In 1925, he entered the sales department of the Vapor Company at St. Paul, where he has been in charge of sales in the northwest

Chester D. Tripp has been elected president of the Grip Nut Company, Chicago, to succeed John H. Sharp, resigned. Ernest H. Weigman, of the sales department, has been appointed sales manager. Mr. Tripp is a large stockholder of the company and has been a member of the board of directors for twenty years. He is an industrial engineer and is associated with a number of other companies either as a director or officer. He has been active in the last two decades in the iron and steel industry, in mining and metallurgy, and in general industrial enterprises.

The sales and general offices of the Grip Nut Company have been moved from South Whitley, Ind., to 310 S. Michigan avenue, Chicago, at which address the company has maintained an executive office for a number of years.

Arthur W. Steudel has been elected president of the Sherwin-Williams Company, succeeding George A. Martin, who becomes chairman of the board. Mr. Steudel was born in Cleveland, Ohio, in 1892. He entered the employ of the Sherwin-Williams Company in 1908 as office boy and in 1912 went into the railway sales department, in 1913 to the industrial sales department, and in 1915 to the dye, chemical and color department. In 1919 he went to New York as eastern manager of this latter department and in 1923 returned to Cleveland as assistant to the president and manager of the dye, chemical and color department. In 1929 he was promoted to vice-president and in 1937 became vicepresident and general manager, which position he held until his current election as president. Mr. Martin started to make paint specialties for railway locomotives and other railway equipment in 1887 and in 1891 joined Sherwin-Williams as manager of the Calumet Paint Company Division at Chicago. In 1898 he became manager of the western district and in 1901 went to Cleveland in charge of the company's mining, smelting, linseed oil and can manufacturing operations. He became vicepresident in 1916, general manager in 1921 and president in 1922. Next year will mark his fiftieth anniversary with Sherwin-Williams.

Financial

Bennettsville & Cheraw.—Abandon-ment.—This company has been authorized by Division 4 of the Interstate Commerce Commission to abandon a portion of its main line extending from Blenheim Junction, S. C., to Drake, 3.3 miles.

Bessemer & Lake Erie.—Equipment Trust Certificates.—This company has been authorized by Division 4 of the Interstate Commerce Commission to assume liability for \$4,000,000 of one per cent serial equipment trust certificates, maturing in 10 equal annual installments of \$400,000 on December 16 in each of the years from 1941 to 1950, inclusive. The issue has been sold at 99.216 to Salomon Brothers & Hutzler, acting on behalf of themselves and Dick & Merle-Smith and Stroud & Co., Inc., making the average annual cost to the company approximately 1.15 per cent.

CHESAPEAKE & OHIO.—Abandonment.— This company has been authorized by Division 4 of the Interstate Commerce Commission to abandon its Carter branch, extending from Garrison, Ky., to Poplar, 17.4 miles.

ERIE. - Reorganization .- Federal Judge R. N. Wilkin at Cleveland, Ohio, on December 17 approved the Interstate Commerce Commission's plan for reorganiza-tion of this road. The plan, which was summarized in the Railway Age of April 20, page 712, reduces capitalization of the road from \$490,953,630 to \$332,692,250 and would give the present preferred and common stock holders a chance to share in the earnings of the new company through the issuance of new common stock and pur-chase warrants. The Chesapeake & Ohio, which has had control of the road through ownership of 55.68 per cent of its voting stock, would receive something less than 10 per cent of the new preferred and common.

FLORIDA EAST COAST.—Reorganization.

—Judge L. W. Strum of the federal district court at Jacksonville, Fla., on December 12 approved a decision concurred in by all parties in interest to effect reorganization of this road under section 77, as being a more "prompt and expeditious disposition of the whole matter." The Florida East Coast has been in equity receivership since September 1, 1931.

LOUISVILLE & NASHVILLE.—Equipment Trust Certificates.—This company has been authorized by Division 4 of the Interstate Commerce Commission to assume liability for \$6,770,000 of its 13% per cent serial equipment trust certificates, maturing in 10 equal annual installments of \$677,000 on December 15 in each of the years from 1941 to 1950, inclusive. The issue has been sold at 100.309 to Halsey, Stuart & Co., Inc., making the average annual cost to the company approximately 1.32 per cent.

NEW YORK CENTRAL.—Operation.—A finding by Division 4 of the Interstate Commerce Commission that the terms and

MODERN LIMA POWER

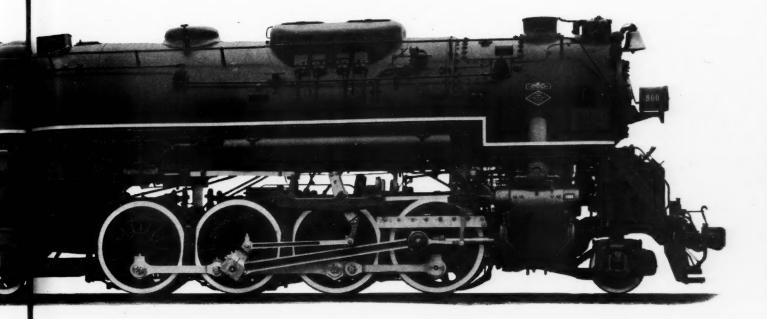


WE	IGHTS IN WO	RKING ORDER	R, POUNDS		
On Drivers	Engine Truck	Trailer Truck	Total Engine	Tender Loaded 2/3 of Capacity	
248,500	50,100	70,900	369,500	194,166	
	WHEEL BASE				
Driving	Engine	Engine & Tender	TRACTIVE EFFORT AT 85% CUT-OFF	TENDER CAPACITY Water Coal	
16′-9″	37′-3″	76′-0″	55,600	14,300 18 gal. ton	
BOILER		CYLINDERS		DRIVING WHEEL	
Diameter	Pressure	Diameter	Stroke	Diameter	
82 1/16 O.D. at Front	260 lbs.	23"	30"	63"	



LIMA

TO SPEED-UP OPERATIONS





The Lima Locomotive Works, Incorporated, has delivered four high-speed, heavy duty freight locomotives to the Detroit, Toledo & Ironton R. R. Co. These locomotives are to be used to augment present main-line locomotives in keeping with the railroad's progressive policy of up-to-date power to stay abreast of traffic demands.

LOCOMOTIVE WORKS, INCORPORATED

conditions of the proposed agreement covering the operation by this company of the properties of the Dillonvale & Smithfield are unjust and unreasonable and that the application should be denied has been recommended by I. C. C. Examiner Lucian Jordan in a proposed report.

The examiner points out that the Dillonvale, which is a small coal line owned by the United States Coal Company and extending from Dillonvale, Ohio, to Smithfield, some five miles, proposes to sign an agreement with the New York Central under which that company would have the exclusive right to operate the line for a term of five years from the date of execution and thereafter from year to year unless terminated by either party upon one year's notice in writing. As rental the Central would pay \$4 a carload for freight handled in interline movement to or from the line, including coal purchased by the Central for its own use, maintain the property, and pay all taxes thereon, except income, social security, unemployment, old age retirement, or assessments chargeable to the capital account.

"The evidence," says the examiner, "is insufficient to serve as the basis for determining the value of the property in question, but it is clear that the estimate of \$240,000 (the Central's) is without proper support. Assuming that the value were proper, the record shows that it has been more than recovered in rental already paid, and that the proposed arrangement would result in the recoupment of almost three times the value within a few years. In the determination of the issues in this case the relationship between the Dillonvale and the coal company, which owns its stock and furnishes its traffic, is an important factor.'

NORFOLK SOUTHERN.—Equipment Trust Certificates and R. F. C. Financing.—This company has asked the Interstate Commerce Commission to approve a plan whereby it would issue and sell to the Reconstruction Finance Corporation \$938,-000 of its three per cent serial equipment trust certificates maturing in 30 semiannual installments beginning August 1, 1941, and maturing in the amount of \$32,000 on that date, and \$32,000 on each February 1 and August 1, thereafter to and including February 1, 1945, and \$31,000 on August 1, 1945, and \$31,000 on each February 1 and August 1 thereafter to and including February 1, 1956.

The proceeds will be used as part payment for new equipment costing \$946,000 and consisting of 250 40-ton A. A. R. 4-C-40, steel-sheathed, wood-lined box cars; 50 50-ton all-steel gondola cars, and 50 50-ton hopper coal cars.

SMOKY MOUNTAIN. - Abandonment. -This company has asked the Interstate Commerce Commission for authority to abandon its entire line extending from Vestal, Tenn., to Sevierville, 29.2 miles, and for authority to abandon operation, under trackage rights, over a line of the Southern from Vestal, Tenn., to Knoxville, 2.2 miles.

Southern .- Abandonment by the Southern of Kentucky.-The Southern of Kentucky and the Southern, respectively, have been authorized by Division 4 of the Interstate Commerce Commission to abandon a line and the operation of the line extending from Versailles, Ky., to Georgetown, 16.6 miles.

PEORIA & EASTERN.—Adjustment Plan. -This road, which is operated by the Big Four, has notified holders of its first consolidated mortgage bonds that its plan of adjustment, dated January 10, 1940, has become effective, and requests them to present bonds or certificates of deposit with the Central Hanover Bank & Trust Company, 70 Broadway, New York, (1) to receive payment of \$450 in case such payment has not already been made and (2) attachment to the bonds of the extension agreement.

TEXAS CITY TERMINAL .-- R. F. C. Loan. -This company has asked the Interstate Commerce Commission to approve a loan to it from the Reconstruction Finance Corporation in the amount of \$1,897,000, to be evidenced by a like amount of first mortgage, 20-year, sinking fund, four per cent bonds, series A, to be dated January 24, 1941. The proceeds would be used to retire at their maturity on January 26, 1941, the company's outstanding first mortgage bonds in the amount of \$1,897,700.

TOLEDO, ANGOLA & WESTERN.-Note.-This company has been granted authority by Division 4 of the Interstate Commerce Commission to issue at par a secured promissory note in the amount of \$210,000, and bearing interest at the rate of three per cent, the proceeds to be applied to the redemption of \$211,700 of the company's outstanding first mortgage six per cent gold coupon bonds, which are due July 1, 1945. The note will mature in three equal annual installments of \$10,000 on January 1, in each of the years from 1943 to 1945, inclusive, and a final installment of \$180,-000, representing the balance of the principal amount then remaining unpaid, on January 1, 1946.

WICHITA FALLS & SOUTHERN .- Acquisition.-This company has been authorized by Division 4 of the Interstate Commerce Commission to acquire the properties, rights, and franchises of the Wichita Falls & Southern Railway and the Wichita Falls, Ranger & Fort Worth,

Average Prices of Stocks and Bonds

Average price of 20 repre-	Dec. 17	Last week	
sentative railway stocks Average price of 20 repre-	29.24	29.79	31.20
sentative railway bonds		60.88	58,09

Dividends Declared

Allegheny & Western.—\$3.00, semi-annually, payable January 1 to holders of record December 20.

Canada Southern.—\$1.50, semi-annually, payable February 1 to holders of record December 27.

27.
Canadian Pacific.—Preferred (final), 2 per cent, payable February 1 to holders of record January 1.
Joliet & Chicago.—\$1.75, quarterly, payable January 6 to holders of record December 26.
Providence & Worcester.—\$1.50, quarterly, payable December 31 to holders of record December 11.

Virginian.—62½¢, quarterly; Extra, 62½c, both payable December 27 to holders of record December 20.

Wheeling & Lake Erie.—\$1.00, quarterly, Extra \$1.50, both payable December 23 to holders of record December 21.

Railway Officers

EXECUTIVE

L. W. Horning, regional director, Eastern region, Competitive Transporta-tion Research, Association of American Railroads, with headquarters at New York, has resigned, effective January 1, to become assistant to vice-president—personnel of the New York Central, at New York. Mr. Horning will be succeeded as regional research director of the Association of American Railroads by J. C. Greenway, attorney for the Railway Express Agency, New York. Mr. Horning was born at Seymour, Ind., on November 2, 1898, and



L. W. Horning

attended Indiana University and Benjamin Harrison law school in Indianapolis. He entered the service of the American Express Company on April 16, 1916, at Indianapolis and served with that company and its successors, the American Railway Express Company and the Railway Express Agency, Inc., successively as chief clerk, terminal agent, superintendent of vehicles, route agent and attorney. Mr. Horning was admitted to the bar on May 10, 1927, and represented the Railway Express Agency exclusively until August 1, 1933, when he was employed as attorney for the legal committee of 18 Indiana railroads and the Railway Express Agency, Inc. For a short time Mr. Horning was secretary of the Legislative committee, Indiana Lines, and for three years was chairman of the Legislative committee, Railroad Employees' and Taxpayers' Association of Indiana. He also served as a director of the Indianapolis Convention and Publicity Bureau until August, 1936, when he was appointed regional director, Eastern region, Competitive Transportation Research, Association of American Railroads.

FINANCIAL, LEGAL AND **ACCOUNTING**

Ralph Dunbar Hemp, whose promotion to assistant general auditor of the Bessemer & Lake Erie at Pittsburgh, Pa., was reported in the Railway Age of No-



"Tailor Made" YET STANDARDIZED!

Each Security Arch is "tailor made" to suit the individual class of power in which it must function. But so effectively is Security Arch Brick standardized that only six different Security Brick patterns are needed for more than $50\,\%$ of the Security Arch Brick used.

This high standardization reflects the engineering and experience of the American Arch Company.

It simplifies the application of the brick arch and saves the stores department a vast amount of trouble.

This foresight of the American Arch Company in adhering to standards is but one of the many ways in which the American Arch Company is serving the railroads.



There's More to SECURITY ARCHES Than Just Brick

HARBISON-WALKER REFRACTORIES CO.

Refractory Specialists



AMERICAN ARCH CO.

60 EAST 42nd STREET, NEW YORK, N. Y.

Locomotive Combustion Specialists

-- vember 23, was born on December 29, 1884, at Pittsburgh. Mr. Hemp was graduated from Millvale (Pa.) public school in 1898 and from business school at Pittsburgh in 1903. He entered railroad serv-



Ralph Dunbar Hemp

ice on November 1, 1908, with the Bessemer & Lake Erie, serving as stenographer until February 1, 1912, then holding various positions in the bookkeeping department until 1920. He was chief clerk, bookkeeping and statistical division, from 1920 to 1926 and served from the latter date until 1937 as general accountant. Mr. Hemp was general accountant and chief of general statistical division from 1937 until November 1, when he was promoted to assistant general auditor.

Alvin William Mayne, whose promotion to auditor of disbursements of the Bessemer & Lake Erie at Pittsburgh, Pa., was reported in the Railway Age of November 23, was born on January 22, 1881, at Bellevue, Ohio. Mr. Mayne was graduated from Bellevue (Ohio) high school in May, 1897, and entered railroad service on May 15, 1897, with the New York, Chicago & St. Louis, serving until July, 1898, as clerk and caller. From August, 1898,



Alvin William Mayne

to November, 1899, he served as clerk and telegraph operator for the Columbus, Sandusky & Hocking (now Pennsylvania). From December, 1899, to August, 1902, Mr. Mayne served as agent, clerk and tel-

egraph operator on the Wheeling & Lake Erie and from the latter date to September, 1904, he was agent at Kent, Ohio, for the same road. From October, 1904, to September, 1912, he was traveling auditor, chief traveling auditor and chief clerk, accounting department, Wheeling & Lake Erie, Wabash, Pittsburgh Terminal Ry. and West Side Belt. In October, 1912, Mr. Mayne went with the Bessemer & Lake Erie, serving successively as traveling auditor, chief traveling auditor and general chief clerk, holding the latter position at the time of his recent promotion to auditor of disbursements.

O. M. Dawson, whose promotion to general superintendent of the eastern general division of the Norfolk & Western at Roanoke, Va., was noted in the Railway Age of December 7, entered the service of the Norfolk & Western as a laborer in the motive power department at Bluefield, W. Va., in June, 1911, working there during summer months for the next five years while attending college. In 1916 he was regularly employed as chainman in the engineering department at Roanoke and held that position until May, 1917, when he entered military service. Following the war,



O. M. Dawson

he was re-employed as boilermaker and in August, 1923, was transferred to the Radford division as assistant roadmaster. year later he was transferred to the Scioto division. Mr. Dawson was promoted to roadmaster on the Shenandoah division in January, 1927, later serving as assistant superintendent of the Shenandoah, Radford, Scioto and Pocahontas divisions, successively. In July, 1938, Mr. Dawson was appointed superintendent of the Pocahontas division, and on January 1, 1940, he was transferred to the Scioto division at Portsmouth, Ohio, the position he held until his recent promotion to general superintendent of the eastern general division.

OPERATING

C. E. Hix, superintendent transportation of the Seaboard Air Line, has been appointed assistant general superintendent transportation, with headquarters as before at Norfolk, Va. K. W. Rodwell, assistant superintendent transportation, has been appointed assistant general superin-

tendent transportation. The positions of superintendent transportation and assistant superintendent transportation have been abolished.

Effective January 1, **D. J. Swope**, superintendent on the Pere Marquette, with headquarters at Detroit, Mich., will be promoted to superintendent of transportation, with the same headquarters, succeeding **Hans O. Halsted**, who will retire on that date.

Mr. Halsted was born at Milwaukee, Wis., on February 5, 1863, and attended business college. He entered railway service in 1884 as a warehouse laborer and freight office clerk on the Union Pacific, later advancing through various positions to that of assistant superintendent in 1889. In February, 1893, he went with the Flint & Pere Marquette (now the Pere Marquette) as a dispatcher, later serving as agent at Port Huron, Mich. From 1893 to 1896, Mr. Halsted was connected with a logging and ore carrying line, returning in the latter year to the Flint & Pere Marquette in charge of the Toledo, Ohio, terminals. He then served successively as chief dispatcher and trainmaster at Grand Rapids, Mich., superintendent at Plymouth, Mich., general superintendent and superintendent of telegraph, superintendent of terminals at Chicago, superintendent of transportation, superintendent of the Detroit division and general superintendent of transportation. In March, 1920, Mr. Halsted was appointed superintendent of car service, with headquarters at Detroit, and on August 1, 1934, he was appointed superintendent of transportation, with the same headquarters, the position he now

C. W. Van Horn, general manager of the Eastern lines of the Baltimore & Ohio at Baltimore, Md., has been elected vicepresident, operation and maintenance, to succeed the late C. W. Galloway.

J. W. Kirk, whose promotion to superintendent of the Shenandoah division of the Norfolk & Western at Roanoke, Va.,



J. W. Kirk

was noted in the Railway Age of December 7, entered the service of the Norfolk & Western in November, 1912, as yard clerk at Wilcoe, W. Va. From November, 1913, to November, 1917, Mr. Kirk held

Season's Greetings



SUPERHEATERS • FEEDWATER HEATERS AMERICAN THROTTLES • STEAM DRYERS EXHAUST STEAM INJECTORS • PYROMETERS SUPER HEATER

Representative of AMERICAN THROTTLE COMPANY, INC. 60 East 42nd Street, NEW YORK 122 S. Michigan Ave. CHICAGO

Montreal, Canada
THE SUPERHEATER COMPANY, LTD.

f

l-k

the positions of clerk to assistant trainmaster at Williamson, W. Va.; clerk to superintendent of the Pocahontas division; yard brakeman at Bluefield, W. Va.; chief clerk to terminal trainmaster at Bluefield; and traveling agent in the superintendent of transportation's office, respectively. Following military service, he re-entered the employ of the Norfolk & Western in September, 1919, as traveling agent, and a year later was appointed assistant yardmaster at Bluefield. In March, 1923, Mr. Kirk was appointed yardmaster at Bristol, Va., and in September, 1933, was promoted to assistant trainmaster of the Pocahontas division, being promoted to trainmaster of that division on September 16, 1936, the position he held until his recent promotion to superintendent of the Shenandoah divi-

L. C. Ayers, whose promotion to assistant general manager of the Norfolk & Western at Roanoke, Va., was noted in the Railway Age of December 7, was born at Oak Level, Va., on April 8, 1875. He started his railroad career in September,



L. C. Ayers

1890, as a water boy on the Roanoke & Southern at Roanoke, one of the predecessor lines of the Norfolk & Western. From 1892 to February, 1895, he served on the Radford division successively as timekeeper, track watchman, section laborer, freight brakeman and work train flagman. From February, 1895, to 1901, he worked on the Scioto division (then known as the Kenova division) as section foreman, extra gang foreman and work train foreman. In 1901 he was promoted to roadmaster on the Cincinnati and Kenova districts. Mr. Ayers was promoted in 1906 to general supervisor of maintenance and structures on the Scioto division. He was appointed superintendent of construction on the same division in 1909. During the period 1912 to 1923 he held the positions of superintendent of construction on the Scioto division and assistant division superintendent on the Scioto, Pocahontas and Norfolk divisions. On February 16, 1923, he was promoted to superintendent on the Shenandoah division at Roanoke, and on October 1, 1934, Mr. Ayers became general superintendent of the eastern general division at Roanoke, the position he held

until his recent promotion to assistant general manager.

TRAFFIC

F. G. Cronin, division freight agent on the Chicago, Indianapolis & Louisville (Monon), with headquarters at Chicago, has been promoted to assistant vice-president in charge of traffic, with the same headquarters.

George W. Eggert, agent for the Delaware, Lackawanna & Western at Syracuse, N. Y., will be promoted to division freight agent at Syracuse, on January 1, 1941, succeeding Hubert L. Cole, who will retire on that date.

Effective January 1, H. F. Koenig, assistant general agent, freight department, on the Chicago, Burlington & Quincy at Chicago, will be promoted to general agent, freight department, at that point, succeeding H. A. Pence, who will retire on that date.

John E. Clark, general agent for the Pere Marquette at Chicago, has been promoted to division freight agent at Saginaw, Mich., succeeding R. A. Gordon, who retired on December 1. L. J. Hurckes, commercial agent at Chicago, has been advanced to general agent at that point, replacing Mr. Clark.

I. C. Kuhns, general agent of the Western Maryland at Philadelphia, Pa., has been promoted to general eastern agent at New York, succeeding J. G. Linthicum, whose death on November 15 was reported in the *Railway Age* of November 23. J. P. Lynch, commercial freight agent at Chicago, has been appointed general agent at Philadelphia, to succeed Mr. Kuhns.

Walter Dobbs, special passenger representative of the Canadian National at Montreal, Que., has been appointed general passenger agent at Winnipeg, Man., succeeding Osborne Scott, who has been appointed passenger traffic manager, western region at Winnipeg, to succeed Robert Creelman, who retired from active service on December 18.

Harry B. Willis, whose promotion to general passenger agent of the Chicago, Indianapolis & Louisville (Monon), with headquarters at Chicago, was announced in the Railway Age of December 7, was born in Chicago on January 14, 1888, and entered railway service in the auditor's office of the Chicago, Rock Island & Pacific at Chicago on March 4, 1904. During the first World War, he served with the U. S. Navy, returning to railway service in March, 1920, in the auditor's office of the Monon at Chicago and six months later he was appointed city passenger agent. Mr. Willis was promoted to chief clerk to the general passenger agent in March, 1925, and in February, 1929, he was advanced to general agent, the position he held until his recent promotion.

ENGINEERING AND SIGNALING

William Walter Crowley, whose appointment as general inspector maintenance of the Lehigh Valley at Bethlehem,

Pa., was reported in the Railway Age of December 7, was born on January 13, 1899, at Farmington, N. Y. After attending the public grade and high schools at Victor, N. Y., Mr. Crowley entered railroad service with the Lehigh Valley on June 1, 1912, as track laborer. He served in that capacity until April 1, 1916, when he was appointed rail inspector. Mr. Crowley became section foreman on November 18, 1918, subsequently becoming extra gang foreman. From February 1 to July 15, 1929, he was assistant track supervisor, becoming track supervisor on the latter date and serving in that capacity until his recent appointment as general inspector maintenance, effective December 1.

Ralph E. Patterson, whose appointment as engineer maintenance of way of the Lehigh Valley at Bethlehem, Pa., was reported in the Railway Age of December 7, was born on March 9, 1889, at Bangor, Me. Mr. Patterson was graduated from the University of Maine in 1911, with a degree in civil engineering. He entered railroad service in October, 1912, with the Lehigh Valley, serving on the engineering corps at Buffalo, N. Y. In 1916 he became assistant engineer at Buffalo and from 1920 to 1927 he served as division engineer at Hazleton, Pa., being transferred to Sayre, Pa., in 1927 and to Easton, Pa., in 1929. Mr. Patterson was appointed assistant to chief engineer at Bethlehem in 1937, the position he held until his recent appointment as engineer maintenance of way, effective December 1.

PURCHASES AND STORES

F. G. Mole, storekeeper on the Union Pacific at Pocatello, Idaho, has been promoted to assistant general storekeeper, with headquarters at Omaha, Neb., succeeding A. R. Mullens, who continues with the same title and headquarters, relieving J. L. Sullivan, who has retired.

Mr. Sullivan was born at Virginia City, Nev., on December 31, 1888, and entered railway service with the Southern Pacific on June 16, 1906. In May, 1918, he went



F. G. Mole

with the Union Pacific as division storekeeper at Cheyenne, Wyo., later serving successively as chief clerk to the division superintendent at Cheyenne, division storekeeper at Omaha, traveling storekeeper,

in the Long Run

of modern locomotives require the best forgings that experience and money can buy. "Knowing how" to manufacture such forgings is Alco's specialty. We have the plant and personnel to turn out any job to suit your requirements.

AMERICAN LOCOMOTIVE COMPANY

general traveling storekeeper and storekeeper at the Omaha general store. On April 1, 1940, he was promoted to assistant general storekeeper, the position he held until his retirement.

Mr. Mole was born in Croyden, Utah, on September 18, 1886, and entered rail-way service on July 24, 1903, as a material clerk in the engineering department of the Union Pacific at Saline, Utah. He left railway service from November 16, 1903, to April 14, 1904, returning on the latter date as a helper in the store department of the Oregon Short Line (now part of the Union Pacific) at Ogden, Utah. On June 30, 1904, he was appointed a clerk and a year later he was appointed store foreman. On August 31, 1907, Mr. Mole was promoted to senior clerk and on November 10, 1911, he was appointed chief clerk in the Oregon Short Line store department at Salt Lake City, Utah. He was further advanced to storekeeper at Pocatello on October 16, 1920, the position he held until his recent promotion,

Herbert R. Nelson, chief clerk of the store department of the Elgin, Joliet & Eastern, has been promoted to general storekeeper, with headquarters as before at Joliet, Ill., succeeding John Otto, whose death on November 24, was announced in the Railway Age of November 30. Mr. Nelson was born in Joliet on



Herbert R. Nelson

December 10, 1896, and entered railway service on August 8, 1912, as a messenger boy in the mechanical department of the E. J. & E. at Joliet. On January 4, 1913, he was transferred to the stores department, and on August 13, 1913, he was appointed junior clerk in the office of the general storekeeper. He was later promoted through all the various clerical positions in that office, becoming chief clerk on August 16, 1931, the position he held until his recent promotion which was effective December 16.

OBITUARY

Charles Edward Burnett, general agent for the Chicago, Rock Island & Pacific at Portland, Ore., died suddenly at that point on December 13.

Frank Carter, retired assistant treasurer of the Chicago & Illinois Midland,

whose death at Springfield, Ill., on December 7, was announced in the Railway Age of December 14, was born in Birmingham, England, in 1860 and entered railway service on the Chicago & Alton (now the Alton), serving as a statistician, general bookkeeper and agent at Carrollton, Ill., and Alton. He was later appointed auditor of the Quincy, Carrollton & Kansas City (at that time a subsidiary of the Alton) and also served on special assignments in the general offices in Chicago. In June, 1909, Mr. Carter was elected auditor and assistant treasurer of the Chicago & Illinois Midland, with headquarters at Chicago. He was later transferred to Springfield, and in 1926 his title was changed to assistant treasurer, the position he held until his retirement in 1932.

Willard A. Collie, superintendent of transportation of the New York, Chicago & St. Louis at Cleveland, Ohio, died on December 13. Mr. Collie was born at Martin, Mich., on November 28, 1871 and entered railway service in 1889 as telegraph operator for the Grand Rapids & Indiana (now Pennsylvania), serving in this capacity until 1890. He then served successively with that road as telegraph operator at various stations, in the train dispatcher's office at Fort Wayne, Ind.; as car distributor at Fort Wayne; assistant chief clerk to superintendent of the Western division, chief clerk to superintendent of the Eastern division at Buffalo, N. Y., and chief clerk to superintendent of transportation at Cleveland. In 1911 Mr. Collie was appointed superintendent car service at Cleveland, becoming superintendent freight transportation in 1918. He was appointed superintendent of transportation at Cleveland in 1923, the position he held until his

Charles W. Galloway, vice-president in charge of operation and maintenance of the Baltimore & Ohio, died on December 14 in Bon Secours hospital, Baltimore, Md., where he had been confined following a heart attack which occurred about three weeks ago. Mr. Galloway was 72 years old, having been born on December 11, 1868, at Baltimore. He was educated in the public schools of Baltimore, but spent much of his early childhood with his grandparents at Sandy Hook, Md., where he absorbed much of the atmosphere of early railroading. On August 23, 1883, he entered service of the Baltimore & Ohio in Baltimore as messenger in the telegraph department and eventually became clerk, then stenographer to the master of transportation. He later served as clerk and stenographer to the manager, then to the general superintendent. Successively he became secretary to the general superintendent of transportation and to the general superintendent of the railroad. was promoted to trainmaster on September 23, 1897, on the Baltimore division and on July 1, 1899, was advanced to assistant superintendent, main line first division, at Cumberland, Md. On November 1, 1901, he became superintendent of the Cumberland division; on December 2, 1903, superintendent, Baltimore division; on December 1, 1906, superintendent of transportation, Baltimore & Ohio system, at Baltimore; on July 1, 1910, general superinten-

dent of transportation; on April 24, 1912, general manager; on July 1, 1916, vicepresident and general manager, Baltimore Ohio Southwestern and Baltimore & Ohio Western Lines, at Cincinnati, Ohio. At the time of the World War, during federal control of railroads, Mr. Galloway was made federal manager of the Baltimore & Ohio Western Lines and the Dayton & Union, June 1, 1918, to February 1, 1919, when he became federal manager of the Baltimore & Ohio Eastern Lines, the Western Maryland, Cumberland Valley, the Coal & Coke and other similar lines. From January 15 to March 1, 1920, Mr. Galloway was federal manager of the Baltimore & Ohio System, Staten Island Rapid Transit, Baltimore & New York, Coal & Coke, Morgantown & Kingwood, Dayton Union and Dayton & Union. When the railroads were returned to corporate control, March 1, 1920, Mr. Galloway was elected vice-president in charge of operation and maintenance of the Baltimore & Ohio system, the position which he held at his death.

Mr. Galloway is descended from a line of railroaders. His grandfather, William Galloway, Sr., 1809-1890, was one of the Baltimore & Ohio's earliest engineers and driver of one of its first horse cars which pulled trains between Baltimore and Ellicott City, then Ellicott's Mills. His father, Charles Barton Galloway, 1847-1883, had



Charles W. Galloway

begun his railway service as apprentice at Mt. Clare. Subsequently he became machinist, gang foreman in charge of locomotive building, locomotive fireman and passenger locomotive engineer. He lost his life in a railway accident. Mr. Galloway's uncle, Christian Smith, B. & O. engineer, was the inventor of the first sandbox used on a locomotive. Mr. Smith lived to be 98 years old.

On November 1, 1930, Mr. Galloway was appointed by the Austrian Government as Consul for Austria in the States of Maryland and Delaware, with headquarters at Baltimore. He served three terms (not successive) as president of the Cincinnati Union Terminal Company and two terms as president of the Monongahela. He was a member of the Labor Dispute Arbitration Board in 1934, and was named a member of the Maryland State Committee on the World's Fair, New York, in 1939.